

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

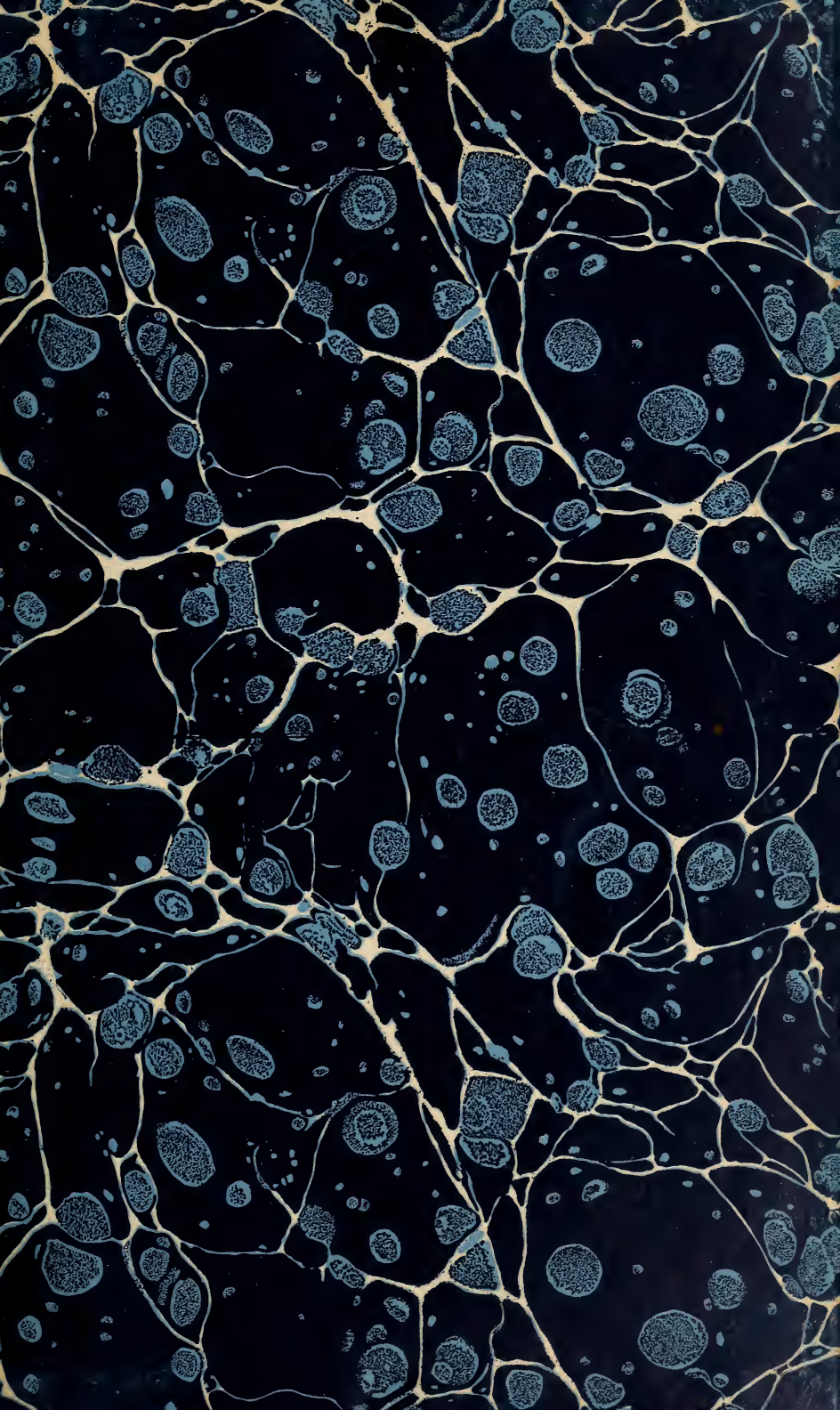
UNITED STATES
DEPARTMENT OF AGRICULTURE
LIBRARY



Book number

1
F315

no. 59-77



U. S. DEPARTMENT OF AGRICULTURE, FEDERAL HORTICULTURAL BOARD.

C. L. MARLATT, *Chairman*; W. A. ORTON, GEO. B. SUDWORTH, W. D. HUNTER, KARL F. KELLERMAN, R. C. ALTHOUSE, *Assistant to the Chairman*.

SERVICE AND REGULATORY ANNOUNCEMENTS.

JANUARY—MARCH, 1923.

CONTENTS.

Quarantine and other official announcements:	Page
The pink bollworm—	2
Eradication possible (press notice)-----	2
Progress in disinfecting cottonseed-----	3
Status of control work in Louisiana-----	4
Texas compensation claims-----	4
Movement authorized of cotton two or more years old from infested districts in Louisiana-----	4
New Mexico law providing for licensing and regulation of cotton ginneries, sterilization of cottonseed, etc-----	4
Record of field scouting 1917 to 1922-----	7
Report on cleaning of cotton fields-----	10
Record of permits issued under Federal and State quarantines, by years-----	15
Record of permits issued under Federal and State quarantines, classified by commodities-----	15
Nursery stock, plant, and seed quarantine (No. 37)-----	15
Revised form of application for special permit-----	17
Personal liability agreement to replace bond (HB-165)-----	17
Revision of explanation of provisions for entry of restricted plants (HB-105, February 26, 1923)-----	18
Revision of explanation of provisions for entry of restricted plants (HB-105, March 31, 1923)-----	22
European corn borer quarantine, domestic, extension of (amendment No. 4 to regulations)-----	26
Press notice-----	27
Broom corn, foreign-----	27
Entry restricted to the period between November 1 and March 31-----	28
Directions for disinfection (HB-161)-----	29
Entry under sterilization at San Francisco, Calif., authorized-----	30
Cotton regulations revised-----	37
Press notice-----	37
Mill use of fumigated cotton substantially without risk (HB-163)-----	37
Hydrocyanic-acid gas fumigation of cotton and cotton wrappings as condition of entry (HB-164)-----	39
Fumigation of imported cotton at Portland, Oreg., authorized-----	40
Extension of white pine blister rust quarantine (No. 34)-----	40
Press notice-----	41
Instructions to postmasters-----	41
Sand, soil, or earth from Porto Rico and Hawaii—action postponed-----	42
Potato regulations, revised (amendment No. 2)-----	43
Press notice-----	43
Amendment No. 2 withdrawn (press notice)-----	44
Summary of State inspection requirements of parcel post shipments under the provisions of the act of March 4, 1915-----	44
Summary of penalties imposed for violations of Federal plant quarantine and regulatory orders-----	45
Miscellaneous items-----	46
Conditions which must be met in plant exports to England and Wales (HB-160)-----	48
Federal plant quarantine act—purpose and field covered (HB-162)-----	50
Memorandum for employees who use transportation requests in official travel-----	50
Instructions for reporting loss or damage to shipments-----	51
Convictions for violations of the plant quarantine act-----	52
List of current quarantine and other restrictive orders-----	52

QUARANTINE AND OTHER OFFICIAL ANNOUNCEMENTS.

THE PINK BOLLWORM.

ERADICATION OF PINK BOLLWORM POSSIBLE, YEAR'S WORK INDICATES.

(Press notice.)

FEBRUARY 24, 1923.

Ultimate eradication of the pink bollworm from the infested cotton areas in the United States is indicated as a possibility, says the United States Department of Agriculture, in view of the apparent elimination of the pest from the very large infested areas of Louisiana and central and eastern Texas, where intensive control methods have been adopted and enforced. A force of some 70 field inspectors have scouted the fields on the lookout for the pest for a total of 2,000 full working days during the year just passed and have failed to locate a single infested boll in the area designated. Only one infested boll was found in this area in 1921, and that after similar intensive scouting.

Although these areas have been free from the pest for practically two years, this situation, says the department, satisfactory as it is, should not be the basis for the relinquishment of any precautions or the reduction of thoroughgoing field scouting for the next two or three years. The work should be maintained at a maximum for at least two years more to make sure that no incipient infestation is overlooked.

Certain areas of infestation along the Rio Grande in western Texas and in the upper valleys of the Pecos in Texas and in New Mexico have not been included in this intensive campaign against the bollworm, because neither the State nor the planters concerned were willing to adopt the radical measures necessary until a full demonstration had been made of the possibilities of a clean-up elsewhere. With respect to these areas, a great deal of field cleaning work, however, has been done, and effective control has been maintained of all the cotton and cotton products originating in these areas, safeguarding its movement and utilization. In these areas, under these conditions, a certain amount of infestation was to have been expected and especially in the cotton planted in small valleys bordering the Rio Grande and within easy reach, therefore, of infestation either by human carriage or by flight of the insects from fields on the Mexican side of the river, and some infestation has recurred, but much less than in previous years. Altogether in these border areas, from the Great Bend of the Rio Grande westward, 26 fields have been found infested, and these sparsely. Twenty-four of these have been immediately along the river in the Great Bend district and two near El Paso.

No infestation has been determined this year in the Pecos Valley, either in western Texas or in New Mexico. The apparent disappearance of the pink bollworm in the Pecos districts may be due to climatic control, and there is a possibility that in these elevated valleys (2,600 to 3,100 feet) the winter fluctuations in temperature may hold this pest in considerable or occasionally in complete subjection. The same also may be true to a less extent in the El Paso district, the elevation of which is 3,700 feet above sea level.

PROGRESS IN DISINFECTING COTTONSEED.

The joint work which the department and several States have under way against the pink bollworm was greatly strengthened the past season by the perfection and installation of cottonseed disinfecting machines. Disinfecting machines were installed in all of the regulated zones in Texas and New Mexico during 1922 and handled the entire seed crop of the year in those zones. There were 37 of these machines in operation. They treated about 35,000

tons of seed. They were found to be perfectly workable in practice and exceedingly economical in operation. The cost of operation ranged from 10 to 25 cents per ton of seed.

The pink bollworm normally feeds on the seeds of the cotton plant. It may remain in a dormant condition in seed for as long as two years. Consequently, the carriage of cottonseed from place to place is by far the most important agency in the dissemination of the pest. The pink bollworm succumbs to a temperature of about 140° F. Cottonseed can withstand a temperature of about 160° without injury to its germinating power. Acting on these facts an exhaustive series of experiments was performed in one of the infested districts in Mexico with various types of machines through which the seed could be run and subjected to a temperature sufficient to kill the worm and not injure the seed. Two distinct types of machines for accomplishing this result were perfected. They are installed in such a manner that the seed passes through them as a part of the continuous process of handling at the gins. The machine is merely interposed between the battery of gins and the seed house. In this way all seed passing through the gins is subjected to a temperature which will kill the pink bollworm.

The installation of these machines practically eliminates any danger of the carriage of infestation over long distances. This has been the principal danger which has confronted the department in its fight against the pink bollworm. The process, however, will not bring about local extermination of the pest for the reason that enough of the larvae will remain in the fields in seed which has fallen to the ground to maintain the infestation. Nevertheless, the use of disinfecting machines will tend very greatly to reduce the volume of local infestation.

The machines are of two types. The more common one consists of from 17 to 61 steam pipes arranged more or less in cylindrical form. These pipes are stationary. There is an inclosing cylinder which revolves. On the inner wall of these cylinders are devices which carry the seed from the bottom and repeatedly drop it so that it falls between the heated pipes. The other type discharges live steam directly against the seed, which is thoroughly separated as it passes through the chamber. Both machines are made in sizes sufficient to handle without interruption the discharge of seed from a battery of four gins.

STATUS OF CONTROL WORK IN LOUISIANA.

At a meeting of the Louisiana Pink Bollworm Commission in Baton Rouge on January 4, formal action was taken on the following points:

1. To discontinue the noncotton zone in Caddo and Bossier Parishes, effective at once. (The Shreveport zone.)
2. To continue the regulated zone in Caddo and Bossier Parishes as at present.
3. To continue the regulated zone in Cameron Parish as in 1922.

It was also decided to require the installation of disinfecting machines at all the gins operating in regulated zones in Louisiana in 1923.

The action in abolishing the Shreveport noncotton zone is based upon the fact that no cotton has been planted for two years and the scouting during that period has disclosed no infestation. In 1921, 322 man-days of scouting and in 1922, 262 man-days gave negative results.

The Louisiana commission finds itself without sufficient funds to pay all the claims of planters in the 1922 noncotton zone at Shreveport. The total amount of these claims is \$27,445.30. The commission has on hand \$16,038.63, leaving a deficiency of \$11,406.67. It is proposed to have an early meeting of the Louisiana Liquidation Board and an effort will be made to secure authority from that board for the Pink Bollworm Commission to borrow sufficient money to pay all of the claims.

Under the provision for Federal participation with the States in compensation of farmers in noncotton zones, given in the act of Congress approved August 9, 1921, the Federal Government has paid to the State of Louisiana \$41,971.64 as to the 1921 crop. We have not yet been advised as to the exact amount of the claims which the Federal Government will be called upon to pay with respect to the 1922 crop, but it will be approximately \$11,000.

TEXAS COMPENSATION CLAIMS.

The Texas Legislature passed a bill March 13, 1923, making an appropriation to pay the claims arising out of the noncotton zone of 1918. The amount fixed, \$417,081.50, is the exact figure fixed in the report of the Compensation Claim Board dated January 18, 1923.

This bill was vetoed by the governor on April 4.

Under the provision for Federal participation with the States in compensation of farmers in noncotton zones, given in the act of Congress approved August 9, 1921, the Federal Government has paid to the State of Texas \$610 as to the 1921 crop and \$16,823.58 as to the 1922 crop. This act gives no authority to participate in the payment of claims originating prior to its effective date, August 9, 1921.

MOVEMENT AUTHORIZED OF COTTON TWO OR MORE YEARS OLD FROM INFESTED DISTRICTS IN LOUISIANA.

In addition to the order governing movement of linters from infested districts in Louisiana, which appears on pages 132 and 133 of Service and Regulatory Announcements No. 69, for the period August-December, 1920, the board, under date of March 24, 1923, authorized the free movement, under permit and necessary safeguards, of regulated cotton lint which has been in storage for two years or more. The action both in the case of linters and of lint is based on the evidence obtained that the pink bollworm will not survive in cotton seeds or lint beyond a two-year period.

NEW MEXICO LAW PROVIDING FOR LICENSING AND REGULATION OF COTTON GINNERS, GINS, STERILIZATION OF COTTON-SEED, ETC.

SIXTH LEGISLATURE.

STATE OF NEW MEXICO.

HOUSE BILL No. 149.

An Act to provide for the licensing and regulation of cotton ginneries, gins, the sterilization of cottonseed, the keeping of records by ginneries, and the manner of baling of cotton and marking bales, and providing penalties for the violation of any provisions of this act.

Be it enacted by the Legislature of the State of New Mexico:

SECTION 1. After July 1st, 1923, each and every cotton gin that may be operated in the State of New Mexico, either by an individual, partnership, joint stock company or corporation shall be charged with a public use and not later than the first day of July, 1923, shall be required to obtain a license as a public ginner by making application to the regents of the Agricultural College of New Mexico.

Provided, however, that in the event of a gin being established subsequent to July 1st, 1923, then such gins or ginneries shall be required to secure license as provided in this act.

That each license shall be issued for a period not exceeding one year and shall specify the date upon which it is to terminate, and upon a satisfactory showing to said regents may from time to time be renewed or extended by a written instrument, which shall specify the date of its termination. The fee for issuing each such license or the renewal or extension thereof is hereby fixed at the sum of ten (\$10.00) dollars, the same to be paid to the secretary-treasurer of the regents of the Agricultural College of New Mexico for the use of the said regents in the execution of the provisions of this act.

The application for the license must state: (a) Location of the gin; (b) the name and address of the owner or operator; (c) number of gin stands; and (d) the number of bales of cotton ginned during the next preceding season. Such application shall be accompanied by a bond in the form prescribed by the regents of the Agricultural College of New Mexico, and must be approved by the chairman of said board, or his duly authorized agent. Such bond shall be in the sum of not less than two hundred and fifty (\$250.00) dollars nor more than one thousand (\$1,000.00) dollars for each gin licensed and shall be payable to the State of New Mexico for the use and benefit of all who may have a cause of action against the maker of said bond under the provisions of this

act. When the amount of the bond has been reduced by reason of any judgment thereon, the maker thereof shall be required to give a new bond or make good the impairment. The conditions and obligations in the bond shall be in conformity with the requirements of public ginners set forth in this act.

SEC. 2. Any person or persons, corporation, or associations of persons who shall operate a gin without first procuring license and giving a bond as herein provided or who shall continue to operate such gin after such license has been revoked or such bond may have become void or found insufficient surety for the penal sum in which it is executed, shall be guilty of a misdemeanor, and upon conviction be fined in a sum not less than one hundred (\$100.00) dollars nor more than five hundred (\$500.00) dollars for each and every day such business is carried on, and the regents of the Agricultural College of New Mexico may refuse to renew any license or grant a new one to any person or persons whose license has been revoked, within one year from the time same was revoked.

SEC. 3. All gins licensed to operate under this act shall be properly equipped to operate in such a manner that the grade of cotton shall not be impaired nor the staple injured, and should such gin be operated in such manner that the cotton ginned therein be impaired or damaged by reason of such lack of equipment or improper methods of ginning, such ginner shall be liable for the damage so incurred under the bond furnished to the State with his application for license, said amount to be recovered by suit brought in the name of the party damaged thereby.

SEC. 4. Each and every ginner shall well and truly mark each bale with the initials of the owner and weight and number of the bale; furthermore each and every ginner shall be required to securely attach to each bale of cotton, when ginned, one metal tag or seal securely fastened with metal attachment showing license number, serial number of bale, and the name and address of the ginner. This tag shall be prima facie evidence that the ginner has been properly licensed under the provisions of this act. Suitable metal tags or seals with metal attachments shall be provided by the State board of regents upon the receipt of cash payment for same, which charge shall be a reasonable sum. The metal tags or seals shall in addition to proper marks of identification show the year for which they are issued and the tags or seals issued for one season shall not be used for any succeeding season.

Provided, that if for any cause any particular license shall be suspended or revoked, all issued metal tags or seals in the possession of said licensee shall be returned to the regents of the Agricultural College of New Mexico or their duly authorized agent, until such time as said license may be renewed or the time of suspension shall have expired.

In all areas quarantined or regulated by reason of the infestation by the pink bollworm, all gins operating within such regulated zones shall mark all bales of cotton ginned with the letter "Q" stenciled in marking ink on each end of the bale just over the edge of such bale on opposite corners in such manner that the letter "Q" will appear on both ends of the bales upon both top and bottom bagging.

SEC. 5. Each and every ginner and any officer, servant, or employee of a corporation, person, or gin company conducting the ginning business under the provisions of this act, or any other person, persons or corporation who shall fraudulently, wilfully or knowingly "plait" or pack a bale of cotton, which is to say, who shall wilfully and knowingly place on the outside of said bale a better grade and quality of cotton than on the inside of said bale or who shall gin cotton when it is wet or who shall in the process of ginning said bale of cotton or thereafter add water or any foreign substance to said cotton shall be guilty of an offense hereunder.

SEC. 6. No license shall be issued or granted to any ginner under the terms of this act until such gin is equipped with a disinfecting machine that will expose all cottonseed to a temperature of not less than 145 degrees F. for a period of not less than three and five-tenths minutes, said machine to be equipped with suitable thermograph and the whole approved by the board of regents or their representative. All seed from every gin operating within the jurisdiction of this act shall be required to conduct all seed directly from the gin stands to the disinfecting machines and passed through the same in the manner required by this act. This shall be construed to mean that when for any reason said disinfecting machine shall fail to heat the seed

to the required temperature all ginning operations shall cease until such condition shall be corrected.

SEC. 7. All ginners operating within the State shall keep permanent records of all cotton ginned in a manner approved by the board of regents, which records shall show the name of the ginner, bonded gin number, name of person for whom cotton was ginned, weight of the bale, weight of the seed, marks and numbers placed on bales and name of person to whom bale and seed was delivered, which records shall at all times be open to inspection by officers, agents, or employees of the regents of the Agricultural College of New Mexico.

SEC. 8. The regents of the Agricultural College of New Mexico are hereby given supervision of the administration and enforcement of this act and shall have full power and authority to delegate inspectors and agents to assist in the enforcement of such act and shall have full power and authority to make such rules and regulations as may be necessary to a full and complete enforcement thereof.

SEC. 9. From and after July 1st, 1923, it shall be unlawful for any person to do or cause to be done any act or anything prohibited by this act, or fail to do anything required of him under it, the person or persons so offending shall be guilty of a misdemeanor and on conviction thereof shall be fined in any sum not less than twenty-five (\$25.00) dollars nor more than two hundred (\$200.00) dollars, or may have his license suspended or revoked, unless a different offense and a different penalty is provided for by this act.

SEC. 10. Upon the complaint of any person in writing, filed in the district court of the county in which such gin is licensed to operate, setting forth the particular violation of this act, to be sustained by satisfactory proof to be taken in such manner as may be directed by the court, said court shall determine whether or not there has been such a violation of this act as is complained of, and should such allegations of the complaint be sustained then the court shall assess penalty in accordance with the provisions of section 9 of this act; and the clerk of said court shall certify the said finding and penalty assessed to the regents of the Agricultural College of New Mexico.

SEC. 11. From and after July 1st, 1923 it shall be unlawful for any person, firm, or corporation, or agent of such corporation to sell, or offer for sale, or to purchase or to move, transport, or ship or to accept for shipment any bale or bales of cotton ginned subsequent to July 1st, 1923, to which the ginners metal tag or seal is not properly affixed.

SEC. 12. Every owner or person in charge of a cotton gin shall issue in writing or print a receipt covering the bales of cotton ginned by it and deliver same to the owner or owners of such cotton, when such receipt or receipts are requested in writing, such receipt shall recite the markings on the bale or bales covered thereby and the name or names of the owner or owners thereof as given by the person delivering the said cotton to the gin. Delivery of cotton thus receipted for to any holder of such receipt, properly indorsed or made in favor of the bearer shall exonerate from liability for wrongful delivery, the owner or operator of any gin issuing such receipt and such owner or operator of a gin may require the surrender of such receipt before delivery of cotton described therein to any person or may in lieu of the receipt require a bond indemnifying him against damages for wrongful delivery.

BYRON O. BEALL,

The Speaker of the House of Representatives.

Attest:

R. M. JACKSON,

Chief Clerk of the House of Representatives.

JOSE A. BACA,

President of the Senate.

Attest:

J. W. GIDDINGS,

Chief Clerk of the Senate.

Approved by me this 7th day of March, 1923.

J. F. HINKLE,

Governor of New Mexico.

Indorsed: Filed in office of Secretary of State of New Mexico, March 7, 1923, 11.55 a. m.

SOLEDAD C. CHACON, *Secretary.*

RECORD OF FIELD SCOUTING ON ACCOUNT OF PINK BOLLWORM, 1917 TO 1922, INCLUSIVE.

(This information was prepared by W. D. Hunter and distributed to State quarantine officials January 18, 1923.)

During the scouting work in the crop of 1922 up to December 31, no new infestations by the pink bollworm have been found.

From 1917 to date the pink bollworm has been found in 11 districts. During 1922 infestation was not found in eight of these districts, leaving three in which infestation was found.

In Louisiana no infestations have been found for two years. During this period, 1,982 man-days have been devoted to scouting in that State.

The three districts in which infestation was found in 1922 are all in extreme western Texas.

The scouting in connection with the crop of 1922 will continue for some months utilizing bolls which have been collected and stored in the various districts which have been found infested at any time and in others where there is occasion to suspect that infestation may occur.

Detailed information is given in the five accompanying tables. The initials M-D indicate man-days devoted to scouting.¹

TABLE I.—Amount of scouting and number of infested fields in all districts in which infestation has ever been found.

TABLE II.—Amount of scouting in all districts which at any time have been under suspicion but in which no infestation has ever been found.

TABLE III.—Amount of scouting from 1917 to 1922 in all districts whether infested or not.

TABLE IV.—Amount of scouting conducted in districts which received seed from Carlsbad, New Mexico.

NOTE: This table is especially important on account of the possibility that the Carlsbad shipments might have caused numerous infestations.

TABLE V.—List of districts indicating counties and parishes embraced.

TABLE I.—*Pink bollworm infested districts—Number of man-days scouting and number of infested fields—Crops of 1917 to 1922.*

[T.—Less than one-half day.]

District.	1917		1918		1919		1920		1921		1922	
	Man-days.	Infested fields.	Man-days.	Infested fields.	Man-days.	Infested fields.	Man-days.	Infested fields.	Man-days.	Infested fields.	Man-days.	Infested fields.
Texas:												
Hearne.....	164	5	471	0	650	0	505	0	369	0	110	0
Trinity Bay.....	645	156	829	0	1,796	51	2,006	28	1,518	1	344	0
Big Bend.....	0	0	4	21	T.	1	0	0	22	12	26	24
West Texas—												
Pecos Valley.....	0	0	555	0	1,123	1	850	15	299	21	80	0
El Paso Valley.....	0	0	103	0	158	0	339	14	78	9	117	1
Ennis.....	0	0	0	0	0	0	0	798	5	253	0	0
Marlee.....	0	0	0	0	0	0	0	340	2	174	0	0
Louisiana:												
Cameron.....	0	0	5	0	104	22	213	0	319	0	382	0
Shreveport.....	0	0	0	0	46	0	486	10	320	0	265	0
New Mexico:												
Mesilla Valley.....	0	0	0	0	0	0	a 240	a 5	a 27	a 6	a 55	b 1
Carlsbad.....	0	0	111	0	57	0	310	2	38	4	37	0
Texas.....	809	161	1,962	30	3,727	53	3,729	58	3,430	53	1,121	26
Louisiana.....	0	0	5	0	150	22	699	10	639	0	647	0
New Mexico.....	0	0	111	0	57	0	521	6	59	7	75	0
Total.....	809	161	2,078	30	3,934	75	4,949	74	4,128	60	1,843	26

a Part in New Mexico and Texas.

b In Texas.

In the case of the Mesilla Valley, through which the Texas-New Mexico line runs, on several occasions specimens were actually found in the State of Texas. In the totals for Texas and New Mexico the specimens are segregated according to the States in which they were found. For this reason the totals for the States do not necessarily agree with the totals for the districts indicated in the body of the table.

¹ For the year 1922 these tables are based on records obtained up to December 31 of that year. No additional infestation has developed as a result of inspections to date.

TABLE II.—*Pink bollworm scouting outside of infested districts—Number of man-days scouting and localities scouted—Crops of 1917 to 1922.*

[T.—Less than one-half day.]

State.	1917		1918		1919		1920		1921		1922	
	Man-days.	Localities.	Man-days.	Localities.	Man-days.	Localities.	Man-days.	Localities.	Man-days.	Localities.	Man-days.	Localities.
Central:												
Arkansas.....	0	0	19	9	0	0	0	0	37	2	0	0
Louisiana.....	0	0	12	8	389	19	1,018	56	689	17	7	1
New Mexico.....	0	0	0	0	0	0	7	1	25	11	0	0
Oklahoma.....	0	0	0	0	0	0	0	0	99	3	54	4
Texas.....	375	10	980	38	709	44	1,349	89	3,313	130	1,567	50
Mexico.....	0	0	T.	1	48	21	0	0	208	21	5	2
Western:												
Arizona.....	0	0	43	14	60	23	0	0	316	7	0	0
California.....	0	0	0	0	0	0	14	3	204	13	0	0
Eastern:												
Alabama.....	0	0	25	2	67	6	0	0	16	9	0	0
Florida.....	0	0	0	0	0	0	0	0	10	6	0	0
Georgia.....	0	0	176	6	97	13	0	0	33	18	0	0
Mississippi.....	0	0	19	7	7	2	677	(1)	259	(1)	(1)	(1)
North Carolina.....	0	0	13	3	155	14	0	0	56	11	0	0
South Carolina.....	0	0	114	9	151	14	0	0	60	17	0	0
Tennessee.....	0	0	0	0	0	0	0	0	T.	1	0	0
Total.....	375	10	1,401	97	1,683	156	3,065	149	5,325	266	1,633	57

¹ Some scouting was performed by the State of Mississippi, exact amount unknown.TABLE III.—*Pink bollworm scouting all territory whether infested or not—Number of man-days scouting and localities scouted—Crops of 1917 to 1922.*

[T.—Less than one-half day.]

State.	1917		1918		1919		1920		1921		1922	
	Man-days.	Localities.	Man-days.	Localities.	Man-days.	Localities.	Man-days.	Localities.	Man-days.	Localities.	Man-days.	Localities.
Central:												
Arkansas.....	0	0	19	9	0	0	0	0	37	2	0	0
Louisiana.....	0	0	17	10	539	49	1,717	76	1,328	36	654	25
New Mexico.....	0	0	111	2	57	3	528	12	84	18	75	7
Oklahoma.....	0	0	0	0	0	0	0	0	99	3	54	4
Texas.....	1,184	73	2,942	101	4,436	139	5,078	149	6,743	222	2,688	142
Mexico.....	0	0	T.	1	48	21	0	0	208	21	5	2
Western:												
Arizona.....	0	0	43	14	60	23	0	0	316	7	0	0
California.....	0	0	0	0	0	0	14	3	204	13	0	0
Eastern:												
Alabama.....	0	0	25	2	67	6	0	0	16	9	0	0
Florida.....	0	0	0	0	0	0	0	0	10	6	0	0
Georgia.....	0	0	176	6	97	13	0	0	33	18	0	0
Mississippi.....	0	0	19	7	7	2	677	(1)	259	(1)	(1)	(1)
North Carolina.....	0	0	13	3	155	14	0	0	56	11	0	0
South Carolina.....	0	0	114	9	151	14	0	0	60	17	0	0
Tennessee.....	0	0	0	0	0	0	0	0	T.	1	0	0
Total.....	1,184	73	3,479	164	5,617	284	8,014	240	9,453	384	3,476	180

¹ Some scouting was performed by the State of Mississippi, exact amount unknown.

TABLE IV.—*Scouting to December 31, 1922, in counties which received seed from Carlsbad, N. Mex.—Crops of 1921 and 1922.*

NOTE.—The amount of scouting done in the counties listed was not always proportionate to the amount of seed received. For instance, Cleveland County, Okla., received 78 carloads of Carlsbad seed, and 137 man-days of scouting were performed there in 1921 and 1922. Cameron County, Tex., on the other hand, received only 1 carload of Carlsbad seed, while 419 man-days of scouting were done there. The difference in these cases was that the seed shipped to Cleveland County was all crushed, while none of that shipped to Cameron County was crushed, but all distributed for planting.

In the case of Robertson County, Tex., the large part of the scouting was not on account of the shipment of 196 pounds of Carlsbad seed, but on account of the infestation found at Hearne in 1917.

County.	Seed received.	Man-days scouting.		County.	Seed received.	Man-days scouting.	
		Crop of 1921.	Crop of 1922.			Crop of 1921.	Crop of 1922.
ARKANSAS.				TEXAS—contd.			
Garland.....	327 pounds.....	35	.....	Hill.....	19,300 pounds.....	366	91
OKLAHOMA.				Hood.....	130 pounds.....	7	.....
Cleveland.....	79 cars (crushed)...	90	47	Howard.....	12,784 pounds.....	44	9
Pottawatomie.	191 pounds.....	6	6	Hudspeth.....	200 pounds.....	3	7
TEXAS.				Jim Wells.....	1 car.....	134	129
Archer.....	100 pounds.....	8	2	Johnson.....	15,040 pounds.....	78	.....
Bexar.....	30,000 pounds (crushed).	23	7	Jones.....	195 pounds.....	.....	3
Bosque.....	100 pounds.....	2	.....	Karnes.....	1 car.....	73	39
Brazos.....	7,304 pounds.....	34	34	Kaufman.....	13 cars.....	208	118
Cameron.....	1 car.....	101	318	La Salle.....	40 pounds.....	8	4
Collin.....	9,804 pounds.....	119	88	Lubbock.....	153 pounds.....	3	3
Cooke.....	160 pounds.....	4	3	Matagorda.....	100 pounds.....	29	.....
Cottle.....	50 pounds.....	2	1	Menard.....	260 pounds.....	1	2
Dallas.....	48 cars (crushed)...	149	.....	Mitchell.....	325 pounds.....	148	8
Ellis.....	27 cars (part crushed).	705	258	Montague.....	16,000 pounds.....	125	70
El Paso.....	20 cars (crushed)...	75	127	Montgomery.....	300 pounds.....	8	.....
Floyd.....	744 pounds.....	6	3	Navarro.....	2,074 pounds.....	62	7
Fort Bend.....	2 cars (crushed)...	59	.....	Nolan.....	41,270 pounds.....	86	15
Goliad.....	12,000 pounds.....	20	8	Nueces.....	4,534 pounds.....	191	132
Gonzales.....	1 car.....	7	5	Pecos.....	800 pounds.....	40	28
Grayson.....	800 pounds.....	253	89	Reeves.....	5 cars.....	134	21
Grimes.....	36 pounds.....	19	12	Robertson.....	196 pounds.....	372	114
Guadalupe.....	31 pounds.....	18	5	Scurry.....	2 cars.....	3	10
Hall.....	12,907 pounds.....	215	192	Tarrant.....	6 cars (part crushed)	258	73
Hidalgo.....				Taylor.....	9 cars (crushed)...	41	14
				Tom Green.....	147 pounds.....	12	8
				Ward.....	12,370 pounds.....	125	31
				Williamson.....	1 car.....	146	95
				Total.....		4,667	2,238

TABLE V.—*Districts—Counties or parishes embraced in each district.*

Texas:

Hearne.
Trinity Bay.
Brazoria.
Chambers.
Fort Bend.
Galveston.
Hardin.
Harris.
Jasper.
Jefferson.
Liberty.
Newton.
Orange.
Tyler.
Big Bend.
Brewster.
Presidio.

Texas—Continued.

Pecos Valley.
Pecos.
Reeves.
Ward.
El Paso Valley.
El Paso.
Hudspeth.
Ennis.
Ellis (part).
Kaufman (part).
Navarro (part).
Marilee.
Collin (part).
Grayson (part).
Louisiana:
Cameron.
Acadia.

Louisiana—Continued.

Cameron—Continued.
Allen.
Beauregard.
Calcasieu.
Cameron.
Jefferson Davis.
Vermillion.
Shreveport.
Bossier (part).
Caddo (part).
New Mexico:
Mesilla Valley.
Dona Ana.
El Paso, Tex. (part).
Carlsbad.
Eddy.

REPORT ON THE CLEANING OF COTTON FIELDS ADJACENT TO 1922 NONCOTTON ZONES, TOGETHER WITH SUMMARY OF ALL CLEAN-UP WORK FROM 1917 TO 1922.

[This report with accompanying maps submitted by F. S. Puckett, plant quarantine inspector, March 27, 1923.]

The cotton fields in four pink bollworm districts, three in Texas and one in Louisiana, were cleaned during the fall and winter of 1922 and 1923.

In the past there have been various methods of cleaning cotton fields. The cleaning consisted of either pulling out the plants by the roots, chopping them down with hoes, or cutting them with mowing machines, bringing them together in large heaps, picking up by hand all parts of the cotton plant which are found on the ground, placing the collected material on the stalks, and burning the whole.

In the cleaning of the fields of the 1922 crop unusual conditions warranted another plan. After two years of low prices cotton was high during the fall of 1922. Consequently the farmers picked their fields very thoroughly, leaving a comparatively small amount of cotton on the plants. This thorough and early picking was aided by unusually favorable weather conditions during the fall and the planting of early maturing varieties of cotton. Especially was this the case in the Shreveport and Liberty (Trinity Bay) districts. The method followed in the cleaning of cotton fields in the 1922 crop consisted simply of sending laborers over the fields, very much in the same manner as picking, to pull from the plants all remaining bolls, unpicked and partly picked bolls, and to pick from the ground all fallen pieces of cotton, bolls, etc., the collected material being thrown together in piles and burned. The stalks were left standing.

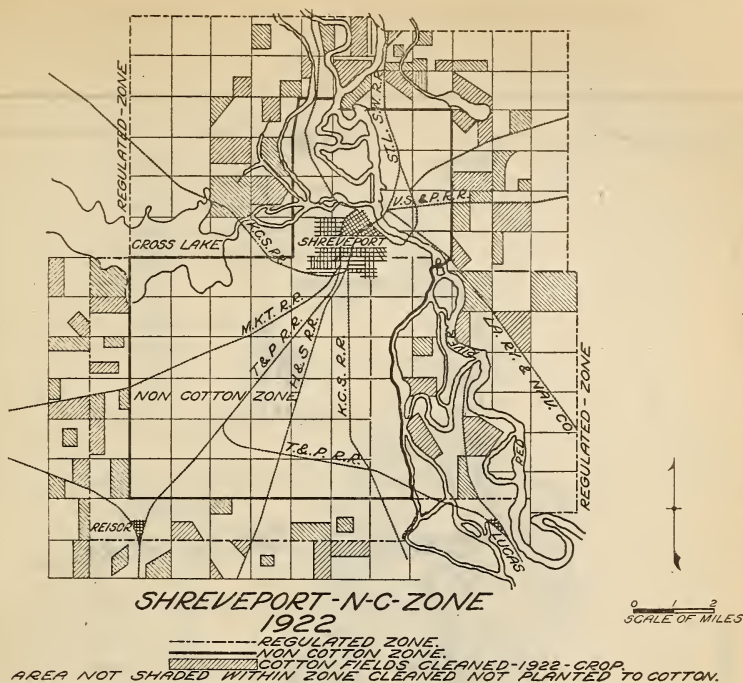
The main part of the work was done during the months of December and January. However, owing to late frosts in the Marilee and Ennis districts the cotton plants in a large number of fields remained green and continued fruiting until January, after which these fields were again picked by the farmers. In those districts the clean-up work was not completed until early in March. In the Shreveport and Liberty districts the fields were grazed by cattle to some extent, thereby reducing the amount of material to be collected. Consequently the work progressed rapidly and was more cheaply done than in the two north Texas districts. Labor was plentiful in both the Shreveport and Liberty (Trinity Bay) districts and it was not necessary to pay over \$1.50 per day.

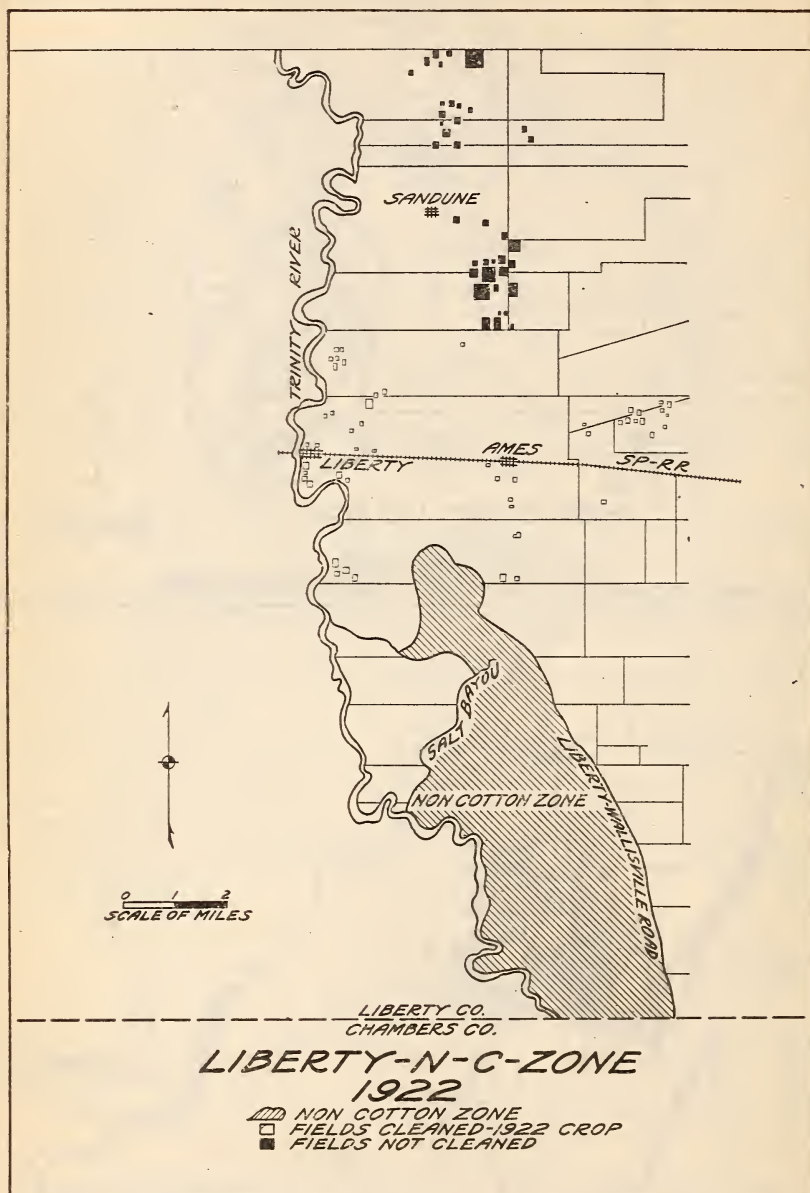
In the two north Texas districts labor was scarce. It was necessary to raise wages from \$1.50 to \$2 per day, in order to secure sufficient labor to do the work. It was also necessary to transport the laborers to and from the fields. Consequently the cost of cleaning the fields in those two districts was much higher than that in the Shreveport and Liberty (Trinity Bay) districts.

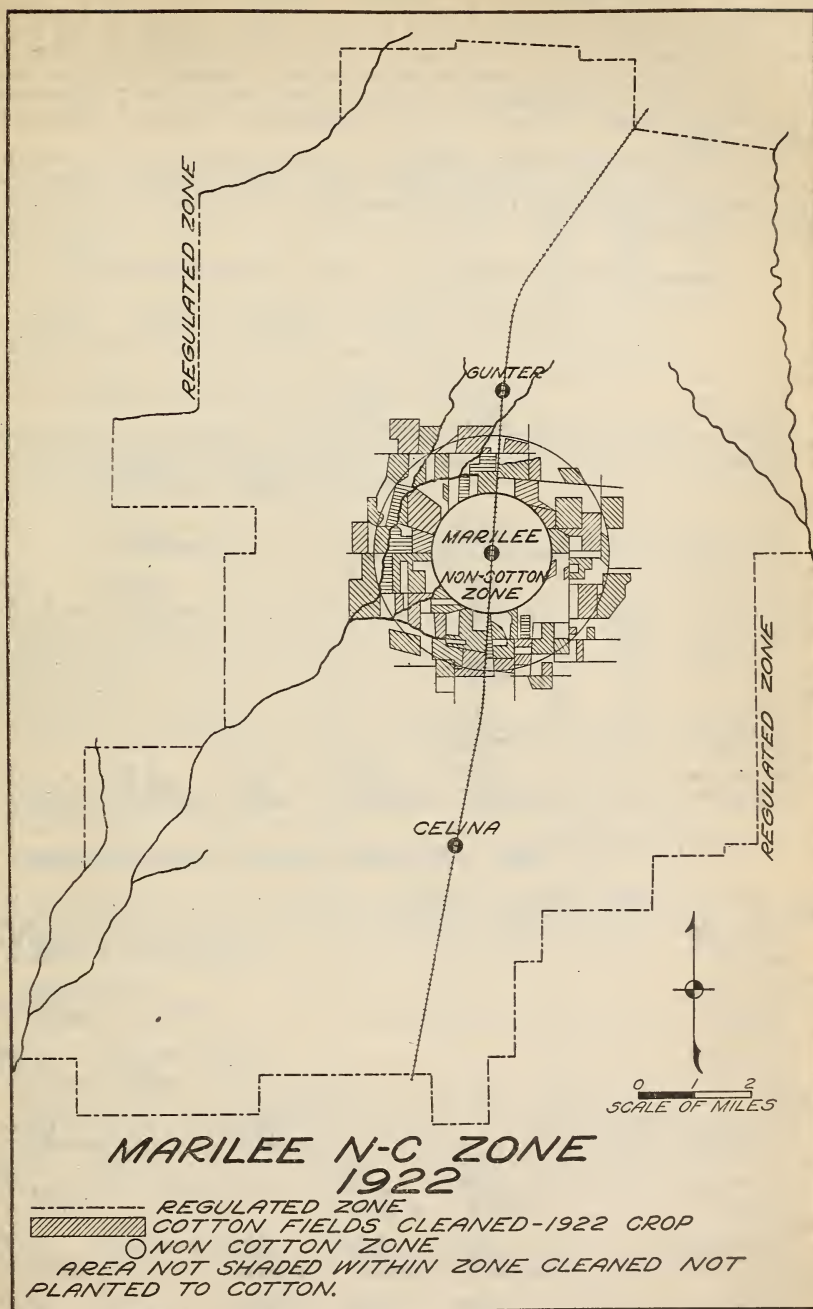
In the four districts a total of 13,405 acres were cleaned, costing \$26,156.24 or at an average cost of \$1.95 per acre. The following is a summary of the work by districts:

District.	Acreage cleaned.	Cost.	Average cost per acre.
Ennis.....	3,004	\$7,688.24	\$2.56-
Marilee.....	3,350	8,574.00	2.56-
Shreveport.....	6,865	9,564.00	1.39+
Liberty.....	186	330.00	1.77+
Total and average.....	13,405	26,156.24	1.95+

Attached hereto are maps of the various clean-up projects. The maps of Marilee and Ennis districts show the entire regulated and noncotton zones and the fields cleaned in a zone 1 mile wide surrounding the noncotton zone. The map of the Shreveport district shows both noncotton and regulated zones. All of the fields within 2 miles adjacent to the noncotton zone were cleaned. The map of the Liberty (Trinity Bay) zone shows the noncotton zone in Liberty County,







the southern end of which joins the noncotton zone around Trinity Bay in Chambers and Harris Counties. The acreage planted to cotton in the regulated zone adjacent to the noncotton zone in Liberty County was small. As indicated on the map, all fields within 6 miles of the noncotton zone were cleaned. All fields planted to cotton in this district are shown. The strip along the west side of the Trinity River shown on the map which is about 6 or 7 miles wide is virtually all swamp land and no cotton was planted in this area during the 1922 crop year.

There is also attached hereto a summary of the cleaning of cotton fields in the various districts for the several years, 1917 to 1922, inclusive, giving the total acreage cleaned, the total amount expended in the district, and the average cost of cleaning per acre.

Summary of the cleaning of cotton fields in various districts.

	Trinity Bay.	Hearne.	Big Bend.	Pecos.	El Paso.
1917 crop:					
Number acres.....	7,171	1,624			
Cost per acre.....	\$9.96-	\$9.87+			
Total cost.....	\$71,407.32	\$16,032.56			
1918 crop:					
Number acres.....			637.5	1,850	
Cost per acre.....			\$.89+	\$17.08+	
Total cost.....			\$569.66	\$31,599.58	
1919 crop:					
Number acres.....	16,463			737	
Cost per acre.....	\$7.36+			\$10.00+	
Total cost.....	\$121,200.91			\$7,370.42	
1920 crop:					
Number acres.....	1,279			1,100	1,123
Cost per acre.....	\$10.66-			\$15.27+	\$15.34-
Total cost.....	\$13,633.61			\$16,802.20	\$17,224.25
1921 crop:					
Number acres.....	2,736				
Cost per acre.....	\$4.64-				
Total cost.....	\$12,694.84				
1922 crop:					
Number acres.....	186				
Cost per acre.....	\$1.77+				
Total cost.....	\$330.00				
Total crop:					
Number acres.....	27,835	1,624	637.5	3,687	1,123
Cost per acre.....	\$7.88-	\$9.87+	\$.89+	\$15.13-	\$15.34-
Total cost.....	\$219,266.68	\$16,032.56	\$569.66	\$55,772.20	\$17,224.25
	Ennis.	Marilee.	Shreveport.	Cameron.	Total.
1917 crop:					
Number acres.....					8,795
Cost per acre.....					\$9.94+
Total cost.....					\$87,439.88
1918 crop:					
Number acres.....					2,487.5
Cost per acre.....					\$12.93+
Total cost.....					\$32,169.24
1919 crop:					
Number acres.....				160	17,360
Cost per acre.....				\$4.86+	\$7.45+
Total cost.....				\$778.00	\$129,349.33
1920 crop:					
Number acres.....			3,233.5		6,735.5
Cost per acre.....			\$16.42+		\$14.96-
Total cost.....			\$53,097.61		\$100,757.67
1921 crop:					
Number acres.....	802	721			4,259
Cost per acre.....	\$4.98-	\$4.76-			\$4.72+
Total cost.....	\$3,992.56	\$3,428.38			\$20,115.78
1922 crop:					
Number acres.....	3,004	3,350	6,865		13,405
Cost per acre.....	\$2.56-	\$2.56-	\$1.39+		\$1.95+
Total cost.....	\$7,688.24	\$8,574.00	\$9,564.00		\$26,156.24
Total crop:					
Number acres.....	3,806	4,071	10,098.5	160	53,042
Cost per acre.....	\$3.07-	\$2.95-	\$6.21-	\$4.86+	\$7.47-
Total cost.....	\$11,650.80	\$12,002.38	\$62,661.61	\$778.00	\$395,988.14

RECORD OF ALL PERMITS ISSUED UNDER FEDERAL QUARANTINES 46 AND 52 AND STATE QUARANTINES, AUGUST 1, 1920, TO FEBRUARY 28, 1923.

	Federal agents.			State agents.	Grand total.
	Federal permits.	State permits.	Total.		
1920 (5 months).....	1,574	4,941	6,515	15,638	22,153
1921 (12 months).....	3,651	5,010	8,661	4,608	13,269
1922 (12 months).....	5,211	4,441	9,652	1,049	10,701
1923 (2 months).....	1,152	574	1,726	70	1,796
Total.....	11,588	14,966	26,554	21,365	47,919

No State agents issued Federal permits, but in many cases State permits were issued by Federal inspectors.

Prior to September 1, 1921, one permit was issued for each bale of cotton shipped intrastate. After September 1, 1921, one permit was issued for each lot of cotton so shipped.

NUMBER OF PERMITS ISSUED UNDER FEDERAL QUARANTINES 46 AND 52 AND STATE QUARANTINES SUPPLEMENTAL THERETO CLASSIFIED BY COMMODITIES.²

Commodity.	1920 (5 months).	1921 (12 months).	1922 (12 months).	1923 (2 months).	Total.
Hay.....	1	30	4,243	825	5,099
Lint.....	21,280	11,975	3,540	469	37,264
Samples.....	399	959	1,679	289	3,326
Cotton seed.....		155	652	64	871
Cottonseed products.....	425	83	343	61	912
Linters.....	14	33	111	56	214
Household goods.....	27	28	75	10	140
Miscellaneous.....	7	6	58	22	93
Total.....	22,153	13,269	10,701	1,796	47,919

² Prior to Sept. 1, 1921, one permit was issued for each bale of cotton. After that date one permit was issued for each lot.

NURSERY STOCK, PLANT, AND SEED QUARANTINE.

APPLICATION FOR SPECIAL PERMIT UNDER REGULATION 14, QUARANTINE NO. 37, TO IMPORT NURSERY STOCK AND OTHER PLANTS AND SEEDS.

Form 207.

Revised Mar. 22, 1923.

-----, 192---

SECRETARY OF AGRICULTURE,

Washington, D. C.

SIR: In accordance with Regulation 14 of the rules and regulations supplemental to Notice of Quarantine No. 37, revised, a special permit is requested for the importation of the following plants for the purpose of keeping the country supplied with new varieties or necessary propagating stock or for necessary experimental, educational, or scientific work:

Quantity.	Estimated invoice value, each.	Name or exact designation of each species, variety, strain, or type of plant to be imported.	Originator.	Year.

Name and address of exporter-----
 Name and address of foreign grower-----
 Country where grown----- Locality where grown-----
 Name and address of person (either applicant or authorized agent) to whom
 plants are to be forwarded after inspection and release by the Department of
 Agriculture-----
 Name and address of person (either applicant or authorized agent) to whom
 permit and shipping instructions should be mailed-----
 Approximate date of importation-----
 Is the importation to be made through the mail?-----
 If so, estimated number of packages-----
 Location of the premises where the material is to be propagated and the
 name of the actual grower-----
 Proposed method of propagation-----
 If the importation is not intended for commercial propagation the applicant
 must furnish the information required in paragraphs 18 to 26, circular No.
 HB-105 with respect to the experimental, educational, or scientific purpose
 intended.

CONDITIONS OF ENTRY.

(1) The imported stock will be used solely for propagation or for the experimental, educational, or scientific purpose stated in this application by the importer or under contract as provided below.

(a) The imported stock will be utilized for the purpose stated in this application by the importer or under contract as provided in 1 (c) in such fashion as to maintain its identity, under the number of the permit granting authority for its importation for the period specified in the permit.

NOTE.—With respect to plants imported for propagation such as astilbes, peonies, etc., which may be multiplied by artificial division, the entire importation, after such division, must be planted and grown for one season regardless of such multiplication by division. The increase over the number imported may, however, be sold after the growing season each year.

In the case of bulbs such as gladioli, etc., in which the old bulb may be multiplied by natural division, the increase above the number imported may be sold after the growing season each year.

Imported bulblets must be retained and grown by the importer for the period specified in the permit.

(b) For the period specified in the permit the board or its representative shall have the privilege of inspecting the stock at any time and, if it is found to be infested or infected with an insect or disease new to or not heretofore widely distributed in the United States, the importer will treat it in accordance with methods to be prescribed by the board or, if necessary, destroy it.

(c) If the importer wishes to arrange with some other person to grow and propagate the imported stock, such growth and propagation shall be provided for under a legal contract approved by the board, which shall require compliance with conditions (a) and (b) hereof, and, in such case, the importer will file with the Federal Horticultural Board either the original or a certified copy of such contract.

(2) The imported plants will be certified by the proper inspection official of the country of export at the time of packing as free from pests, that the roots have been freed from earth, and that the packing materials conform to the requirements of Regulation 7 of the rules and regulations supplemental to Notice of Quarantine No. 37.

(3) If the plants are found upon inspection by inspectors of the Federal Horticultural Board to be so infested or infected with insects or disease that they can not be adequately safeguarded, they may be destroyed and such destruction will not be made the basis of a claim against the Department of Agriculture for damages; it being understood that cleaning and disinfection will be authorized by the board for any slight infestations which can thus be adequately safeguarded.

(4) If any package of stock offered for entry includes any prohibited article or other article not covered by the permit, or if any of the plants have not been freed from earth, the entire package may be refused entry.

(5) The applicant will arrange with some responsible agency in Washington to clear the plants through the customhouse, to transfer them immediately after entry to the inspection house of the department at Twelfth and B Streets NW., and if the quantity of material is larger than can be easily housed in the inspection house of the department, to provide, under the supervision of the department, local storage in Washington for the material during the period of its examination and, if necessary, disinfection; to supply labor for re-packing and additional containers and labor and chemicals for disinfection if such are necessary, it being understood that small shipments will be repacked by the department and forwarded by express, charges collect, to the importer.

(6) The duty, brokerage, and other charges connected with the entry of the plants will be paid by the importer or by his agent or broker.

(7) The applicant will arrange with the foreign shippers to furnish the Federal Horticultural Board with a true copy of the invoice giving an itemized statement of the contents of the shipment.

(8) The plants imported will be restricted to the smallest plants as to size and age, or to portions of plants, that can accomplish the purpose.

LIABILITY AGREEMENT.

In consideration of the approval of this application and of the issuance of the special permit applied for, the undersigned hereby agrees to use the stock imported thereunder, during the period indicated in the special permit, solely for the purposes specified in Regulation 14, hereinbefore referred to, and to comply with all the conditions of entry set forth above and in said special permit, and further stipulates and agrees if said imported stock is used by him otherwise than as specified in said Regulation 14, or if the said conditions or any of them are not complied with by him, in view of the impossibility of estimating with exactness the damages that will result to the United States in consequence thereof, to become liable for, and to pay to the United States, as liquidated damages, a sum equal to twice the invoice value of the stock imported as shown in said permit, if such value be \$2,500 or less, but in no case shall such liability of the applicant exceed \$5,000.

(Witness.)

(Signature of applicant.)

(Address of witness.)

(Address of applicant.)

(APPLICANT WILL NOT WRITE BELOW THIS LINE.)

B. P. I. List.	Approved Hortic.	Status.	Information lacking.	Letter needed.
		Approved Path. in Charge.		

PERSONAL LIABILITY AGREEMENT TO REPLACE BOND, QUARANTINE 37.

HB-165.

MARCH 31, 1923.

At a conference held recently with a committee representing the orchid collectors and growers, the suggestion was made that a liability agreement would probably serve the purposes of the bond which has hitherto been required in connection with all permits issued under Regulation 14, Quarantine 37, with the exception of permits issued to public institutions. This suggestion was taken up promptly with the solicitor of the department and the board has been advised that a properly worded liability agreement would give essentially the same protection which the bond is designed to afford. Such liability agreement has been drafted by the solicitor and will hereafter replace the bond in connection with special permits. The liability agreement is a personal agreement, duly witnessed, and will eliminate the expense which the bond usually involves.

The liability agreement will be incorporated in the application form and must be signed by the applicant before one witness. It will read as follows:

In consideration of the approval of this application and of the issuance of the special permit applied for, the undersigned hereby agrees to use the stock imported thereunder during the period indicated in the special permit solely for the purposes specified in Regulation 14, hereinbefore referred to, and to comply with all the conditions of entry set forth above and in said special permit, and further stipulates and agrees if said imported stock is used by him otherwise than as specified in said Regulation 14 or, if the said conditions or any of them are not complied with by him, in view of the impossibility of estimating with exactness the damages that will result to the United States in consequence thereof, to become liable for and to pay to the United States as liquidated damages a sum equal to twice the invoice value of the stock imported, as shown in said permit, if such value be \$2,500 or less, but in no case shall such liability of the applicant exceed \$5,000.

Any permittee now under bond may have his bond released on the substitution of a liability agreement covering the material imported now under bond.

C. L. MARLATT,
Chairman Federal Horticultural Board.

EXPLANATION OF PROVISIONS FOR ENTRY OF PLANT NOVELTIES AND PROPAGATING STOCK UNDER REGULATION 14, QUARANTINE 37.³

HB-105. Revised February 26, 1923.

1. Before taking up the specific subject of this circular, namely, plant entry under Regulation 14, Quarantine 37, it seems desirable to indicate briefly the necessity for the restrictions on the entry of plants and seeds for propagation under this quarantine.

NECESSITY FOR RESTRICTING THE ENTRY OF PLANTS.

2. Imported nursery stock and other plants and seeds have been the source of the introduction of some 90 per cent of the insect pests and plant diseases which have come to us from other countries and which now occasion losses to our agriculture and forestry of approximately \$1,000,000,000 annually. Hitherto such material has often come with the roots embedded in earth, and practically always it is promptly taken to the field or greenhouse where other plants are growing, thus furnishing the best possible conditions for the local establishment of any insect pests or plant diseases which it may harbor.⁴

3. A practical test over a seven-year period of the possibility of safeguarding plant imports by inspection and disinfection plainly indicated the inadequacy of this method and the conclusion is forced that the only possible means of effectively lessening the introduction of new plant enemies is the policy of exclusion of all plants not absolutely essential to the agricultural and forestry needs of the United States. Carrying out this policy, Quarantine 37 restricts the entry of most nursery stock and other ornamentals to certain purposes which are believed to be necessary to the development of American horticulture. Unlimited entry is permitted, however, of certain classes of plants which it is believed can not at present be adequately produced in the United States, and provision is made for the entry of any other plant whatsoever for which a reasonable need can be shown, either for introduction of new varieties or for propagating stock not available in the United States, or for any experimental, educational, or scientific purpose. Briefly, these provisions are as follows:

PROVISIONS MADE FOR THE ENTRY OF ANY NECESSARY PLANTS.

4. Under Regulation 2 of the quarantine unlimited entry is possible, without permit or other restriction, of field, vegetable, and flower seeds, and of plant products imported for medicinal, food, or manufacturing purposes.

5. Regulation 3 provides for the unlimited entry, under permit and with provision for inspection, and, if necessary, disinfection, of certain important

³ The numbering of paragraphs is for convenience of reference in correspondence.

⁴ Anyone interested will, on application, be sent a document giving somewhat fully the records of the introduction of foreign plant pests.

classes of plants and plant products which can not at present be adequately produced in the United States.

6. Regulation 14 makes provision for the entry, under special permit, of limited quantities of any plant or seed not included under Regulations 2, 3, and 15 for the purpose of keeping the country supplied with new varieties and necessary propagating stock, or for any necessary experimental, educational, or scientific purpose.

7. Regulation 15 recognizes the intimate trade relations between the United States and Canada and Mexico and provides, under permit and necessary safeguards, for the importation of certain classes of plants the entry of which from other foreign countries is restricted.

8. The only exceptions to entry of plants thus provided for are those involved under specific quarantines as, for example, the prohibition of entry of *Ribes* and *Grossularia* from certain countries, and generally of citrus, bamboo, banana plants, etc., but any of the plants prohibited under such quarantines may be imported, under permit and adequate safeguards, by the United States Department of Agriculture for any necessary experimental, scientific or introduction purposes.

ENTRY OF PLANTS UNDER REGULATION 14—DEFINITIONS OF TERMS.

9. As used in Regulation 14, the terms "new varieties," "necessary propagating stock," and "limited quantities" are defined in Regulation 1 under the quarantine as follows:

10. *New varieties*.—A new variety is understood to mean a novelty, i. e., a new plant, variety, strain, type, or form, either recognized by competent societies or associations or by the trade as such or so listed or described in catalogues, trade journals, or other publications, or duly and properly certified as such by the originator or introducer.

11. *Necessary propagating stock*.—Stock of old or standard varieties not available in this country and imported for the multiplication of the plants in question as a nursery or florist enterprise as distinguished from importations for the immediate or ultimate sale of the stocks actually imported.

12. *Limited quantities*.—As used in Regulation 14, "limited quantities" is understood to mean such quantities as will supply any reasonable need for the establishment of commercial reproduction plantings, or as may be necessary for the experimental, educational, or scientific purpose intended.

IMPORTATIONS UNDER REGULATION 14 LIMITED TO DEFINITE PURPOSES.

13. In furtherance of the object of Quarantine 37—i. e., to limit the number and volume of importations of plants as the only effective means of excluding new plant enemies—entry under Regulation 14 of the restricted classes of plants is limited to certain *purposes* or *uses* which are believed to be necessary for the development of American horticulture. These purposes are (1) Introductions for the purpose of starting commercial production in the United States, and (2) Introductions for any necessary experimental, educational, or scientific purpose.

INTRODUCTIONS FOR THE ESTABLISHMENT OF COMMERCIAL PRODUCTION IN THE UNITED STATES.

14. Any new variety of plant or any old or standard variety not commercially available in this country may be imported by any person who will agree to propagate and increase the imported stock and thus render a public service by aiding in making the plants concerned generally available. The immediate sale of plants thus imported is not permitted but these plants must be kept and utilized for the purpose of propagation for a period of from 1 to 5 years, designated in the bond, the period being based on the time needed for such propagation and increase. No restrictions are placed on the sale of plants produced from imported stock during the period of the bond or after its termination, except that the importer will be expected to maintain a sufficient supply to meet his future needs.

15. There is no limitation under Regulation 14 as to the number of permits for different plants or classes of plants which an individual may request, but, prior to the issuance of the permits the varieties applied for will all be passed upon by experts of the Bureau of Plant Industry of the department, for the

information of the board both as to the necessity for the particular importation and as to the quantity adequate for the purpose intended. Plants thus imported will be restricted to the smallest plants as to size and age or to the portions of plants that can accomplish the purpose of the introduction.

16. For inspection and otherwise safeguarding shipments, and to enforce the other conditions of entry, all importations under Regulation 14 must be made through the Federal Horticultural Board of the Department of Agriculture but for the use of the individual importer. With the funds available, the department is able to maintain technically trained inspection forces to supervise such entry at two ports only, Washington, D. C., and San Francisco, Calif., and entry of special permit material is therefore limited to these ports.

17. The bond⁶ required by the Department of Agriculture in connection with special permits was found necessary to prevent the immediate sale by some importers of plants obtained for propagation under such permits. It is the type of bond long used in the customs service for similar purposes and has not proved a serious bar to plant importations. Such bond may be either issued by an approved surety company or it may be certified by personal bondsmen acceptable to the department.

INTRODUCTIONS FOR ANY NECESSARY EXPERIMENTAL, EDUCATIONAL, OR SCIENTIFIC PURPOSE.

18. Under the provision of Regulation 14 for importation for experimental, educational, or scientific purposes, permits will be issued to provide for the needs of botanic gardens, agricultural colleges, experiment stations, and other similar public institutions.

19. Permits for importations for experimental, educational, or scientific purposes will also be issued to amateurs who are widely or nationally known as maintaining collections of real merit and open to the public, or who are engaged in work of public benefit with the plants concerned.

20. The conditions of entry indicated in the last three paragraphs under the preceding heading apply also to entries for experimental, educational, and scientific purposes, except that the bond is not required of botanic gardens, State experiment stations, agricultural colleges, and other similar public institutions.

RESTRICTIONS ON ISSUANCE OF SPECIAL PERMITS TO AMATEURS.

21. As a basis for the issuance to amateurs of special permits under Regulation 14, the status of such applicants as to public service is determined as follows:

All requests for special permits from amateurs who believe their collections are of real merit and of distinct service to the public, or who represent that they are engaged in work of general public benefit with the plants concerned, are first submitted to the Bureau of Plant Industry of this department for examination and recommendation, and the status of the applicants is further determined by endorsements submitted by the applicants themselves or by information obtained by the department from all available sources.

22. In this manner the Federal Horticultural Board is endeavoring to secure and file data with respect to all applicants which may convince anyone of the reasonableness of the action taken.

23. The gates can not be thrown wide open to amateurs, otherwise we would have little restriction on the number and volume of plant importations and correspondingly little or no protection against entry of new pests, but it is highly desirable to recognize the important, but fairly limited, class of amateurs who will perform a *public service* of real value with the plants imported.

24. In the event that the authorized agencies, commercial or other, do not bring in varieties of plants which enthusiastic plant lovers may wish, the department has made special provision for the entry through its Office of Foreign Seed and Plant Introduction for ultimate public distribution of any neglected or overlooked new varieties, and, incidentally, this Office has been undoubtedly the principal agency for the importation of new plants into the United States for the last 20 years.

⁶ A personal liability agreement is now accepted in lieu of the bond hitherto required.

25. To recapitulate, the existing provisions for the entry of new or unavailable plants under Regulation 14 include (1) all the importations which any commercial grower is willing to make, and such commercial growers include persons of world-wide recognition as plant specialists and breeders; (2) importations by botanic gardens and some hundred experiment stations and other public institutions with enthusiastic experts in horticulture and floriculture; (3) importations by the leading and recognized amateurs of the country; and (4) importations through the Office of Foreign Seed and Plant Introduction of the Department of Agriculture.

26. Under the plan, therefore, of Quarantine 37, it becomes necessary for persons who are neither commercial propagators of plants, nor amateurs who are recognized as maintaining collections of real merit, nor engaged in research or other work of distinct public benefit with the plants concerned—in other words, the ordinary plant lover who wants any of the restricted plants for his own garden or the adornment of his own estate—to secure them from home sources, and the department has endeavored, through the means enumerated, to make them available under methods which involve the least risk to the horticulture and agriculture of the country.

PROCEDURE FOR MAKING IMPORTATIONS UNDER REGULATION 14.

27. *Application blank.*—The Federal Horticultural Board will supply, on request, a form of application for special permit to import nursery stock and other plants and seeds under the provisions of Regulation 14. This application, under "Conditions of entry," explains the bonding requirements and also the conditions of packing, inspection, and clearance through the customhouse. It also embodies various agreements which must be subscribed to by the importer to safeguard the importation. The application must be filled out as to all the informational data called for and must be signed by the applicant and forwarded to the Federal Horticultural Board. The applicant should also indicate whether the importation is intended for commercial propagation or for a public institution, or is requested by an amateur for a public-service purpose as defined on a preceding page.

28. *Permit and shipping tags.*—If the permit is issued, the applicant will be furnished with a blank form of bond to be executed and returned to the board, and also with shipping instructions and shipping tags to be forwarded with his order to the exporter. With the exception of transpacific shipments for western destinations, such shipping tags will be addressed to the United States Department of Agriculture, Federal Horticultural Board, Washington, D. C., but will be indorsed with the permit number and name of the importer. Transpacific shipments for all western points entering through the port of San Francisco may be given inspection and clearance at that port in the same manner as at Washington.

29. *Delivery to board in bond.*—Material coming to Washington must be turned over to the Federal Horticultural Board by the importer or his authorized agent, and in the specially equipped inspection houses and under expert care as to the welfare of the plants, it will be carefully examined by the board's inspectors. If the shipment is found to comply with the conditions of entry and to be free from dangerous insects or diseases, it will be immediately repacked and forwarded, charges collect, to the importer.

30. Shipments for clearance at San Francisco will be similarly handled by the agents of the board, Ferry Building, San Francisco.

31. *Disinfection.*—Disinfection will be authorized for slight infestation, but should the material be found to be so infected or infested with either diseases or insects that it can not be adequately disinfected, it will either be destroyed or, when desired, permission may be granted for its exportation.

32. *Storage and repacking.*—So far as possible the board will undertake to provide for storage and repacking. Should importers request, however, permits covering the importation of larger quantities of propagating or other stock under Regulation 14 than can be housed and cared for in the inspection houses of this department, and should such request be approved, the importers may be required to provide local storage in Washington for such material during the period of detention for examination and, if necessary, disinfection, including opening of containers and repacking.

33. *Charges.*—The department will make no charge for inspection and supervision, but the importer will be required to meet all entry, transportation, disinfection, and handling charges—drayage, etc.—and for this purpose should

make arrangements with responsible agencies at port of arrival for forwarding in bond to Washington, D. C., and in Washington for all local charges as indicated.

34. *Mail shipments*.—Permission for importation through the mails of special permit material under Regulation 14 will hereafter be authorized on request when warranted by the nature and amount of the proposed shipment. Such authority, if approved, will be indicated on the permit, and tags for such mail shipments will be furnished. These tags will be addressed to the United States Department of Agriculture, Federal Horticultural Board, either Washington, D. C., or Ferry Building, San Francisco, Calif., and will carry the number of the permit authorizing the importation, and when attached to the package will authorize the foreign postmaster to accept it for shipment. By special arrangement with the United States Post Office Department, such mail shipments, after inspection, may be forwarded to the importer without payment of additional postage. The requirements in the case of mail shipments are somewhat simplified. By arrangement with the customs service such shipments are permitted to come in bond directly to the Department of Agriculture either at the Washington or San Francisco offices of the board, obviating any brokerage service for forwarding from port of first arrival. The importer will have to provide merely for customs clearance either at Washington or San Francisco.

C. L. MARLATT, *Chairman of Board*.

EXPLANATION OF PROVISIONS FOR ENTRY OF PLANT NOVELTIES AND PROPAGATING STOCK UNDER REGULATION 14, QUARANTINE 37.⁶

HB-105. Revised March 31, 1923.

1. Before taking up the specific subject of this circular, namely, plant entry under Regulation 14, Quarantine 37, it seems desirable to indicate briefly the necessity for the restrictions on the entry of plants and seeds for propagation under this quarantine.

NECESSITY FOR RESTRICTING THE ENTRY OF PLANTS.

2. Imported nursery stock and other plants and seeds have been the source of the introduction of some 90 per cent of the insect pests and plant diseases which have come to us from other countries and which now occasion losses to our agriculture and forestry of approximately \$1,000,000,000 annually. Hitherto such material has often come with the roots embedded in earth, and practically always it is promptly taken to the field or greenhouse where other plants are growing, thus furnishing the best possible conditions for the local establishment of any insect pests or plant diseases which it may harbor.⁷

3. A practical test over a seven-year period of the possibility of safeguarding plant imports by inspection and disinfection plainly indicated the inadequacy of this method and the conclusion is forced that the only possible means of effectively lessening the introduction of new plant enemies is the policy of exclusion of all plants not absolutely essential to the agricultural and forestry needs of the United States. Carrying out this policy, Quarantine 37 restricts the entry of most nursery stock and other ornamentals to certain purposes which are believed to be necessary to the development of American horticulture. Unlimited entry is permitted, however, of certain classes of plants which it is believed can not at present be adequately produced in the United States, and provision is made for the entry of any other plant whatsoever for which a reasonable need can be shown, either for introduction of new varieties or for propagating stock not available in the United States, or for any experimental, educational, or scientific purpose. Briefly, these provisions are as follows:

PROVISIONS MADE FOR THE ENTRY OF ANY NECESSARY PLANTS.

4. Under Regulation 2 of the quarantine unlimited entry is possible, without permit or other restriction, of field, vegetable, and flower seeds, and of plant products imported for medicinal, food, or manufacturing purposes.

⁶ The numbering of paragraphs is for convenience of reference in correspondence.

⁷ Anyone interested will, on application, be sent a document giving somewhat fully the records of the introduction of foreign plant pests.

5. Regulation 3 provides for the unlimited entry, under permit and with provision for inspection, and, if necessary, disinfection, of certain important classes of plants and plant products which can not at present be adequately produced in the United States.

6. Regulation 14 makes provision for the entry, under special permit, of limited quantities of any plant or seed not included under regulations 2, 3, and 15 for the purpose of keeping the country supplied with new varieties and necessary propagating stock, or for any necessary experimental, educational, or scientific purpose.

7. Regulation 15 recognizes the intimate trade relations between the United States and Canada and Mexico and provides, under permit and necessary safeguards, for the importation of certain classes of plants the entry of which from other foreign countries is restricted.

8. The only exceptions to entry of plants thus provided for are those involved under specific quarantines as, for example, the prohibition of entry of *Ribes* and *Grossularia* from certain countries, and generally of citrus, bamboo, banana plants, etc., but any of the plants prohibited under such quarantines may be imported, under permit and adequate safeguards, by the United States Department of Agriculture for any necessary experimental, scientific, or introduction purposes.

ENTRY OF PLANTS UNDER REGULATION 14—DEFINITIONS OF TERMS.

9. As used in Regulation 14, the terms "new varieties," "necessary propagating stock," and "limited quantities" are defined in Regulation 1 under the quarantine as follows:

10. *New varieties*.—A new variety is understood to mean a novelty, i. e., a new plant, variety, strain, type, or form, either recognized by competent societies or associations or by the trade as such or so listed or described in catalogs, trade journals, or other publications, or duly and properly certified as such by the originator or introducer.

11. *Necessary propagating stock*.—Stock of old or standard varieties not available in this country and imported for the multiplication of the plants in question as a nursery or florist enterprise as distinguished from importations for the immediate or ultimate sale of the stocks actually imported.

12. *Limited quantities*.—As used in Regulation 14, "limited quantities" is understood to mean such quantities as will supply any reasonable need for the establishment of commercial reproduction plantings, or as may be necessary for the experimental, educational, or scientific purpose intended.

IMPORTATIONS UNDER REGULATION 14 LIMITED TO DEFINITE PURPOSES.

13. In furtherance of the object of Quarantine 37—i. e., to limit the number and volume of importations of plants as the only effective means of excluding new plant enemies—entry under Regulation 14 of the restricted classes of plants is limited to certain *purposes* or *uses* which are believed to be necessary for the development of American horticulture. These purposes are (1) introductions for the purpose of starting commercial production in the United States, and (2) introductions for any necessary experimental, educational, or scientific purpose.

INTRODUCTIONS FOR THE ESTABLISHMENT OF COMMERCIAL PRODUCTION IN THE UNITED STATES.

14. Any new variety of plant or any old or standard variety not commercially available in this country may be imported by any person who will agree to propagate and increase the imported stock and thus render a public service by aiding in making the plants concerned generally available. The immediate sale of plants thus imported is not permitted, but these plants must be kept and utilized for the purpose of propagation for the period designated in the permit, the period being based on the time needed for such propagation and increase. No restrictions are placed on the sale of plants *produced* from imported stock during the period specified in the permit, except that the importer will be expected to maintain a sufficient supply to meet his future needs.

15. There is no limitation under Regulation 14 as to the number of permits for different plants or classes of plants which an individual may request, but, prior to the issuance of the permits, the varieties applied for will all be passed

upon by experts of the Bureau of Plant Industry of the department, for the information of the board, both as to the necessity for the particular importation and as to the quantity adequate for the purpose intended. Plants thus imported will be restricted to the smallest plants as to size and age or to the portions of plants that can accomplish the purpose of the introduction.

16. For inspection and otherwise safeguarding shipments and to enforce the other conditions of entry, all importations under Regulation 14 must be made through the Federal Horticultural Board of the Department of Agriculture but for the use of the individual importer. With the funds available, the department is able to maintain technically trained inspection forces to supervise such entry at two ports only—Washington, D. C., and San Francisco, Calif., and entry of special-permit material is therefore limited to these ports.

17. The bond hitherto required by the Department of Agriculture in connection with special permits has been replaced by a *personal liability agreement* embodied in the application for special permits which must be signed by the applicant and duly witnessed. The amount of the liability will be based on the invoice value of the imported stock, but in no case is to exceed \$5,000. This substitution eliminates the expense which a bond usually involves.

INTRODUCTIONS FOR ANY NECESSARY EXPERIMENTAL, EDUCATIONAL, OR SCIENTIFIC PURPOSE.

18. To meet any necessary experimental, educational or scientific need, provision is made under Regulation 14 for importations (1) by botanic gardens, agricultural colleges, experiment stations, and other similar public institutions, and (2) by any person who is widely or nationally known as maintaining a collection of real merit and open to the public or who is engaged in work of public benefit with the plants concerned.

19. The conditions of entry indicated in paragraphs 15, 16, and 17 under the preceding heading apply also to entries for experimental, educational, and scientific purposes except that the liability agreement is not required of botanic gardens, State experiment stations, agricultural colleges, and other similar public institutions.

IMPORTATIONS BY PUBLIC INSTITUTIONS.

20. As indicated in paragraph 18, special permits will be issued to botanic gardens, agricultural colleges, experiment stations, and other similar public institutions to meet any necessary educational, experimental, or scientific need, such as additions to collections or as a basis for any experimental or research work.

IMPORTATIONS BY AMATEURS AND OTHERS.

21. The limitations indicated in paragraph 18 on the issuance of permits to amateurs and others are believed to be necessary. Otherwise we would have little restriction on the number and volume of plant importations and correspondingly little protection against entry of new pests, but it is realized that it is highly desirable to recognize an important, but fairly limited, class of amateurs and others who will perform a *public service* of real value with the plants imported.

22. Any person who believes that his collection or proposed work entitles him to a special permit under the provisions indicated in paragraphs 18 and 21, as a basis for the issuance of a permit, will be required to furnish full and adequate information under the following headings:

(1) The object of the importation, either (a) additions to a special collection, or (b) for experimental or other research purpose—or both.

If (a), character of collection and its public service nature.

If (b), experimental or research work intended and statement of any other related experimental or research work by applicant.

(2) Names and addresses of persons who are familiar with collection or work of applicant.

23. All such requests for special permits from amateurs and others, together with any endorsements received, are submitted to the Bureau of Plant Industry of this department for examination and recommendation, and the status of the applicant is further determined by information obtained by the department from all available sources.

24. In this manner the Federal Horticultural Board is endeavoring to secure and file data with respect to all applicants which may convince anyone of the reasonableness of the action taken.

25. In the event that the authorized agencies, commercial or other, do not bring in varieties of plants which enthusiastic plant lovers may wish, the department has made special provision for the entry through its Office of Foreign Seed and Plant Introduction for ultimate public distribution of any neglected or overlooked new varieties.

SUMMARY OF PROVISIONS FOR ENTRY OF RESTRICTED PLANTS.

26. To recapitulate, the existing provisions for the entry of new or unavailable plants under Regulation 14 include (1) the importations for propagation which any commercial grower is willing to make, and such commercial growers include persons of world-wide recognition as plant specialists and breeders; (2) importations by botanic gardens and some hundred experiment stations and other public institutions with enthusiastic experts in horticulture and floriculture; (3) importations for a public service purpose by the leading and recognized amateurs of the country, and (4) importations through the Office of Foreign Seed and Plant Introduction of the Department of Agriculture.

27. Under the plan, therefore, of Quarantine 37, it becomes necessary for persons who are neither commercial propagators of plants, nor who are recognized as maintaining collections of real merit, nor engaged in research or other work of distinct public benefit with the plants concerned—in other words, the ordinary plant lover who wants any of the restricted plants for his own garden or the adornment of his own estate—to secure them from home sources, and the department has endeavored, through the means enumerated, to make them available under methods which involve the least risk to the horticulture and agriculture of the country.

PROCEDURE FOR MAKING IMPORTATIONS UNDER REGULATION 14.

28. *Application blank.*—The Federal Horticultural Board will supply, on request, a form of application for special permit to import nursery stock and other plants and seeds under the provisions of Regulation 14. This application, under "Conditions of entry," explains the conditions of packing, inspection, and clearance through the customhouse. It also embodies various agreements which must be subscribed to by the importer to safeguard the importation, including the liability agreement which replaces the bond formerly required. The application must be filled out as to all the informational data called for and signed and forwarded to the Federal Horticultural Board. The applicant should indicate whether the importation is intended (1) for commercial propagation (pars. 14–17) or (2) for a public institution (pars. 18–20), or (3) for a public-service purpose by an amateur or other (pars. 18, 20–24).

29. *Permit and shipping tags.*—With the issuance of the permit, the applicant will be furnished with shipping instructions and shipping tags to be forwarded with his order to the exporter. With the exception of trans-Pacific shipments for western destinations, such shipping tags will be addressed to the United States Department of Agriculture, Federal Horticultural Board, Washington, D. C., but will be indorsed with the permit number and name of the importer. Trans-Pacific shipments for all western points entering through the port of San Francisco may be given inspection and clearance at that port in the same manner as at Washington.

30. *Delivery to board.*—Material coming to Washington must be turned over to the Federal Horticultural Board by the importer or his authorized agent, and in the specially equipped inspection houses and under expert care as to the welfare of the plants, it will be carefully examined by the board's inspectors. If the shipment is found to comply with the conditions of entry and to be free from dangerous insects or diseases, it will be immediately repacked and forwarded, charges collect, to the importer.

31. Shipments for clearance at San Francisco will be similarly handled by the agents of the board, Ferry Building, San Francisco.

32. *Disinfection.*—Disinfection will be authorized for slight infestation, but should the material be found to be so infected or infested with either diseases or insects that it can not be adequately disinfected, it will either be destroyed, or, when desired, permission may be granted for its exportation.

33. *Storage and repacking.*—So far as possible the board will undertake to provide for storage and repacking. Should importers request, however, permits covering the importation of larger quantities of propagating or other stock under Regulation 14 than can be housed and cared for in the inspection house of this department, and should such request be approved, the importers may be required to provide local storage in Washington for such material during the period of detention for examination and, if necessary, disinfection, including opening of containers and repacking.

34. *Charges.*—The department will make no charge for inspection and supervision, but the importer will be required to meet all entry, transportation, disinfection, and handling charges—drayage, etc., and for this purpose should make arrangements with responsible agencies at port of arrival for forwarding in bond to Washington, D. C., and in Washington for all local charges as indicated.

35. *Mail shipments.*—Permission for importation through the mails of special permit material under Regulation 14 will hereafter be authorized on request when warranted by the nature and amount of the proposed shipment. Such authority, if approved, will be indicated on the permit, and tags for such mail shipments will be furnished. These tags will be addressed to the United States Department of Agriculture, Federal Horticultural Board, either at Washington, D. C., or at the Ferry Building, San Francisco, Calif., and will carry the number of the permit authorizing the importation, and when attached to the package will authorize the foreign postmaster to accept it for shipment. By special arrangement with the United States Post Office Department, such mail shipments, after inspection, may be forwarded to the importer without payment of additional postage. The requirements in the case of mail shipments are somewhat simplified. By arrangement with the customs service such shipments are permitted to come in customs bond directly to the Department of Agriculture either at the Washington or at the San Francisco office of the board, obviating any brokerage service for forwarding from port of first arrival. The importer will have to provide merely for customs clearance either at Washington or at San Francisco.

C. L. MARLATT,

Chairman Federal Horticultural Board.

EXTENSION OF EUROPEAN CORN BORER QUARANTINE.

Amendment No. 4 to Regulations Supplemental to Notice of Quarantine No. 43 (2d Revision), as Amended.

[Effective on and after April 1, 1923.]

Under authority conferred by the plant quarantine act of August 20, 1912 (37 Stat. 315), as amended by the act of Congress approved March 4, 1917 (39 Stat. 1134, 1165), and in accordance with Regulation 3 of the Rules and Regulations Supplemental to Notice of Quarantine No. 43 (2d Revision), on account of the European corn borer, promulgated by the Secretary of Agriculture April 7, 1922, as amended, notice is hereby given that the following cities and towns (or townships) are now added to and included within the area infested by the European corn borer, and said Regulation 3 is amended accordingly.

MASSACHUSETTS.—North Attleboro and Westport, in *Bristol County*; Ashby, Dunstable, Groton, Pepperell, Shirley, and Townsend, in *Middlesex County*; Bellingham, Plainville, and Wrentham, in *Norfolk County*; Ashburnham, Blackstone, Bolton, Boylston, Douglass, Fitchburg, Gardner, Grafton, Holden, Hubbardston, Lunenburg, Mendon, Millbury, Northboro, Northbridge, Princeton, Rutland, Sterling, Sutton, Uxbridge, West Boylston, and Westminster, in *Worcester County*.

MAINE.—Sebago, in *Cumberland County*; Acton, Buxton, Cornish, Dayton, Hollis, Lebanon, Limerick, Limington, Newfield, Parsonsfield, Shapleigh, and Waterboro, in *York County*.

RHODE ISLAND.—Bristol and Warren, in *Bristol County*; Little Compton, Middletown, Portsmouth, Tiverton, and Newport, in *Newport County*; Cumberland, Lincoln, and Woonsocket, in *Providence County*.

NEW HAMPSHIRE.—Alton, Barnstead, Belmont, Center Harbor, Gilford, Gilmanston, Laconia, Meredith, New Hampton, Sanbornton, and Tilton, in *Belknap County*; Brookfield, Eppingham, Moultonboro, Ossipee, Tuftonboro, and Wake-

field, in *Carroll County*; Alexandria, Ashland, Bridgewater, Groton, Hebron, Holderness, Orange, and Plymouth, in *Grafton County*; Amherst, Antrim, Bennington, Brookline, Deering, Frankestown, Goffstown, Greenfield, Greenville, Hancock, Hillsboro, Hollis, Lyndeboro, Mason, Milford, Mont Vernon, New Boston, New Ipswich, Pelham, Peterboro, Sharon, Temple, Weare, Wilton, and Windsor, in *Hillsborough County*; Allenstown, Andover, Bradford, Canterbury, Chichester, Danbury, Dunbarton, Epson, Henniker, Hopkinton, Loudon, Newbury, New London, Northfield, Pittsfield, Salisbury, Sutton, Warner, Webster, and Wilmot, in *Merrimack County*; Auburn, Brentwood, Candia, Chester, Danville, Deerfield, Epping, East Kingston, Fremont, Hampstead, Kensington, Newton, Newmarket, Northwood, Nottingham, Raymond, Sandown, South Hampton, South Newmarket, Stratham, and Windham, in *Rockingham County*; Lee, Middleton, Milton, New Durham, and Rochester, in *Strafford County*.

MICHIGAN.—Berlin and Frenchtown in *Monroe County*; Brownstown, Detroit, Ecorse, Gratiot, Greenfield, Grosse Pointe, Hamtramck, Monguagon, and Springwells, in *Wayne County*.

This amendment shall be effective on and after April 1, 1923.

Done at the city of Washington this 26th day of March, 1923.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.]

C. W. PUGSLEY,

Acting Secretary of Agriculture.

CORN BORER QUARANTINE EXTENDED.

(Press notice.)

MARCH 29, 1923.

Extension of the Federal quarantine against the European corn borer to include additional cities and towns in New England and Michigan, effective April 1, was announced by the Federal Horticultural Board, United States Department of Agriculture, in an official notice issued to-day. While fairly large, the new areas brought under the quarantine represent the spread of the pest determined by prolonged fall and winter scouting.

In practically all the territory covered the infestation has not reached a stage to cause serious damage to corn grown in the area, the board points out. It indicates, however, the slow infiltration of the pest through natural movement and more or less by artificial carriage from the main center in the vicinity of Boston. The new areas include the following 13 towns in Maine, 95 towns in New Hampshire, 33 towns in Massachusetts, 10 towns in Rhode Island, and 11 towns in Michigan: [For names of towns see Amendment No. 4, immediately preceding.]

Within the infested area free movement from Boston and other natural distribution centers within the territory is permitted and the quarantine and the regulation of movement of products is limited to movement out of the infested area. Such restriction on movement applies to corn and broom corn (including all parts of the stalk), all sorghums, sudan grass, celery, green beans in the pod, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof without stems. The movement out of the infested area of corn in the ear is prohibited since it is not possible to determine by inspection its freedom from infestation.

FOREIGN BROOM CORN.

ENTRY OF FOREIGN BROOM CORN RESTRICTED TO THE PERIOD BETWEEN NOVEMBER 1 AND MARCH 31.

The following correspondence went to all broom-corn permittees and others in interest:

FEBRUARY 21, 1923.

DEAR SIR: In view of the fact that the European broom corn coming for entry into the United States under the terms of Quarantine 41 (copy inclosed) is practically always infested with the European corn borer, containing many living larvæ and pupæ, it is now deemed necessary, in addition to the safeguard of disinfection, to limit such entry to the period between November 1

and March 31 of each year. The need for this limitation arises from the fact that after March, during the period of delay and hauling prior to disinfection, there is greater danger of the escape of the larvæ or the emergence of adults to thus become a source of establishment of this pest.

You are advised, therefore, to notify immediately your foreign correspondents or shippers, by cable, if necessary, of this restriction as to period during which entry of such broom corn will hereafter be permitted.

Yours very truly,

C. L. MARLATT, *Chairman of Board.*

FEBRUARY 24, 1923.

DEAR SIR: Referring to the board's letter mailed to you February 21, 1923, copy of which is inclosed, limiting entry of broom corn to the period between November 1 and March 31, you are advised that this notice has the effect of amending your permit limiting the entry of broom corn thereunder to the period between the dates mentioned.

With respect to purchases already made and en route, however, the board is willing to consider extending the time limit to make possible the entry of shipments, any delay in the arrival of which is at no fault of the permittee or his agents. As a condition of such extension, the board will require, however, the submittal of evidence showing that the foreign shipper was promptly advised, by cable if necessary, of the necessity for expediting shipment and that all other steps were taken to insure prompt exportation.

Yours very truly,

C. L. MARLATT, *Chairman of Board.*

MARCH 22, 1923.

The board has been advised that information has been circulated in Italy and possibly also in other European countries from which broom corn is exported to the United States to the effect that broom corn *shipped* from countries of origin at any time prior to March 31 would be permitted entry without regard to the date of arrival.

You are advised that there is no basis for this belief. The order limiting the importation of broom corn to the period "between November 1 and March 31 of each year" was issued February 21, 1923. A supplement to this order, issued February 24, pointed out that the order had the effect of amending all outstanding permits restricting the *entry* of broom corn to the period between the dates mentioned in the original order. This supplemental order further stated that, with respect to purchases *already made and en route*, the board would be willing to consider extending the time limit to make possible the entry of such shipments any delay in the arrival of which was not the fault of the permittee or his agents. As a condition of such extension the board announced that it would require the submittal of evidence showing that the foreign shipper had been promptly advised, by cable or otherwise, of the necessity for expediting shipment and that all other steps had been taken to insure prompt exportation. This action was taken in view of the representation that it might be impossible to complete importation by March 31 of certain shipments which had, prior to the issuance of the order amending all permits as indicated above, been purchased and paid for and were either en route or had been assembled and ready for shipment at the shipping point.

You are advised, therefore, that not only have existing permits been qualified as indicated as to the entry period, but that no permits will be issued for purchases made subsequent to the issuance of the order of February 21, 1923, except as to shipments which it is reasonable to believe will reach the port of entry in the United States on or before March 31.

C. L. MARLATT,
Chairman Federal Horticultural Board.

DIRECTIONS FOR THE DISINFECTION OF BROOM CORN.

HB-161.

FEBRUARY 6, 1923.

Regulation 5 of the Rules and Regulations Supplemental to Notice of Quarantine No. 41 (Revised) Governing the Importation of Indian Corn or Maize, Broom Corn, and Related Plants, makes provision for such disinfection of

broom corn as shall be required by the inspector of the Department of Agriculture.

METHODS OF DISINFECTION.

Broom corn, as well as manufactured brooms where it is evident that the brooms contain stalks of sufficient size to harbor the corn borer, must be disinfected by the use of live steam or dry heat. It is understood that the efficiency of live steam or dry heat is dependent upon bringing the stalks of broom corn, as well as any insects which may be within the stalks, up to a temperature known to be fatal to corn borer larvæ.

LIVE STEAM.

The efficiency of live steam for the purpose of disinfecting broom corn is increased and the time consumed in reaching the required temperature within the bales is reduced by producing a 25-inch vacuum prior to the introduction of the live steam. It is important, therefore, from the standpoint of safety to use for this purpose a cylinder which will support a 25-inch vacuum. Incidentally, on account of the rapid radiation of heat from the cylinder, it is advisable that the cylinder be insulated. The method of disinfection (steam sterilization) as approved, is as follows:

The bales are to be introduced into the cylinder, the doors securely closed, and a vacuum of 25 inches produced. Live steam is then to be injected into the cylinder containing the broom corn until a positive pressure of 10 pounds is obtained. This pressure (10 pounds) is to be held for a sufficient period to determine that a constant temperature condition has been reached, after which the steam is to be shut off and a vacuum drawn to remove the steam from the cylinder and the bales of broom corn.

All plants performing broom-corn sterilization work must be provided with an approved recording pressure gauge which will indicate on charts provided for the purpose, the inches of mercury vacuum and the pounds per square-inch pressure. Three or more self-recording thermometers should be available for insertion into bales situated at various points in the fumigation chamber, in order to satisfy the representative of the Federal Horticultural Board that a uniform temperature has been maintained throughout the bales.

DRY HEAT.

It may also be possible to disinfect broom corn by the use of dry heat. In the event that this method is employed, a temperature of 150° F. or more must be maintained uniformly in the middle of the bales, as well as throughout the individual stalks of broom corn, for a period of at least 30 minutes. As is the case with live steam, the exposure necessary to produce a uniform temperature in the bales would probably be reduced by producing a vacuum prior to the introduction of hot air.

In the event that dry heat or hot air is used in lieu of live steam, the plant must be provided with a pressure gauge indicating inches mercury vacuum and pounds per square-inch pressure, and at least three self-recording thermometers.

APPROVAL OF DISINFECTION MACHINERY.

Disinfection machinery to be used in the sterilization of broom corn, by either live steam or hot air, must be tested to the satisfaction of, and approved by, the chief inspector of the Federal Horticultural Board at the port of entry concerned before its use will be accepted as satisfying the requirements of the regulations.

E. R. SASSER,
Entomologist in Charge,
Plant Quarantine Inspection Service.

STERILIZATION OF IMPORTED BROOM CORN AT SAN FRANCISCO, CALIF., AUTHORIZED.

The board is in receipt of advice under date of March 22, 1923, to the effect that the inspector in charge at San Francisco had completed a test of the sterilization plant erected at that port and determined that it could comply

with the sterilization requirements given in H. B.-161, issued February 6, 1923, "Directions for the Disinfection of Broom Corn." The completion of this plant enables the department to permit the entry at San Francisco of broom corn for sterilization and final entry.

Facilities for the sterilization of broom corn are now available at the ports of San Francisco and New York.

RULES AND REGULATIONS GOVERNING THE IMPORTATION OF COTTON AND COTTON WRAPPINGS INTO THE UNITED STATES.

Under the Provisions of the Order of the Secretary of Agriculture, Issued April 27, 1915.

(Revised February 24, 1923.)

INTRODUCTORY NOTE.

This revision of Rules and Regulations Governing the Importation of Cotton and Cotton Wrappings into the United States replaces the edition of July 18, 1917, and is necessitated by the decision of the board to increase somewhat the strength of fumigation at the port of arrival and to discontinue restrictions on the movement and utilization within the United States of imported cotton after the entry requirements, including disinfection, have been met. This change involves some modification of the regulations and the omission entirely of Regulations 8 and 9. The limiting of control of imported cotton to the disinfection and other requirements to be enforced as a condition of entry removes the necessity for licensing cotton mills or other users of imported cotton in the United States. Such use will hereafter be free to any person or mill, and all existing licenses will be canceled.

The permit for the importation of cotton has also been very much simplified. Hereafter a single permit will authorize the permittee to enter cotton and other products covered by these regulations at any port approved by the Federal Horticultural Board for the particular products concerned and for any exporter in any foreign country.

Minor changes have been made more or less throughout the regulations, most of these having relation to the important changes already discussed. The certification formerly required under Regulations 6 and 14, the latter now Regulation 11, is omitted.

For the convenience of permittees and others the explanatory notes which were incorporated under the regulations in the last edition (July 18, 1917) have been retained in this new edition with such omissions and modifications as were necessitated by the changes in the regulations referred to above or as seemed otherwise desirable.

C. L. MARLATT,

Chairman, Federal Horticultural Board.

RULES AND REGULATIONS GOVERNING THE IMPORTATION OF COTTON AND COTTON WRAPPINGS INTO THE UNITED STATES.

Regulation 1.—Definitions.

For the purposes of these regulations, the term "cotton" shall mean raw or unmanufactured ginned cotton,⁸ either baled or unbaled, including all cotton which has not been woven or spun or otherwise manufactured, such as all forms of cotton waste, including thread waste, card strips, willowed fly, willowed picker, picker or blowings, and chum and cotton waste, in any other form or under any other trade designation, and also including secondhand burlap or other fabric which has been used, or is of the kinds ordinarily used, for wrapping cotton.

For the purposes of these regulations, the term "inspector" shall mean an inspector of the Federal Horticultural Board, United States Department of Agriculture.

⁸ The importation of cottonseed, seed or unginned cotton, and cottonseed hulls, except from the locality of the Imperial Valley in the State of Lower California, Mexico, is prohibited by quarantine.

Regulation 2.—Applications for Permits.

Persons contemplating the importation of cotton into the United States shall make application for a permit, on forms provided for that purpose, to the Secretary of Agriculture, Washington, D. C., giving the name and address of the importer in the United States and, if the permit is to be sent to a broker, the latter's name and address also.

Permits will be required for cotton entering the United States for immediate export and for immediate transportation and exportation in bond to foreign countries and, in the case of transportation in bond, the port of entry and the route over which such cotton will be allowed to move will be designated in the permit.

Permits will authorize the entry of cotton at the ports of Boston, New York, Seattle, and San Francisco, and at such other ports of entry as may be approved by the Federal Horticultural Board.

Applications for permits should be made in advance of the shipment of the cotton, on the appropriate form.⁹

(a) *A single permit for each importer.*—A single permit will be issued to each individual importer authorizing him to enter cotton and other products covered by these regulations at any port approved by the Federal Horticultural Board for the particular products concerned and from any exporter in any foreign country.

(b) *Ports of entry.*—In addition to the ports of entry listed in regulation 2, the Federal Horticultural Board has approved the ports enumerated below for the entry of cotton or other products as designated:

1. For the entry of cotton falling under the *proviso to regulation 6*, the additional ports are Philadelphia, Baltimore, Norfolk, Charleston, Savannah, New Orleans, and Portland (Oregon).

2. For the entry of secondhand burlap or other fabric of the kinds ordinarily used for the wrapping of cotton falling under the *first proviso to regulation 11*, the additional ports are Philadelphia, Baltimore, and Portland (Oregon).

3. For the entry of secondhand burlap and other fabric of the kinds ordinarily used for the wrapping of cotton falling under the *second proviso to regulation 11*, the additional ports are Philadelphia, Baltimore, Norfolk, Charleston, Savannah, New Orleans, Galveston, and Portland (Oregon).

4. For the entry of burlap or other fabric of the kinds ordinarily used for wrapping cotton not falling under *either proviso to regulation 11*, the additional port is Portland (Oregon).

5. For the entry of cotton not falling under the *proviso to regulation 6*, the additional port is Portland (Oregon).

Full compliance with the requirements of entry must be made at the first port of arrival in the United States where the requirements can be met.

If cotton or other products falling under these regulations are offered for entry at a port where the entry requirements can not be met, provision must be made either for the prompt transfer of such products to a port where entry can be made, or for their removal forthwith from the port and the territorial waters of the United States. Transfers to other ports for compliance with the regulations, and the routing thereto, must be authorized by the Federal Horticultural Board.

(c) *Entry for immediate export or for immediate transportation and exportation in bond.*—Entry for immediate export or for immediate transportation and exportation in bond will be permitted under the conditions authorized by the Secretary of Agriculture in the rules and regulations governing (1) entry for immediate export, (2) entry for immediate transportation and exportation in bond, and (3) safeguarding the arrival at a port where entry or landing is not intended of prohibited plants and plant products, effective August 1, 1920.

In the case of entry for immediate transportation and exportation in bond, the notices of arrival and exportation and the conditions prescribed in regulations 4, 5, and 6 of the rules and regulations governing such entry for immediate exportation and transportation in bond shall apply.

(d) *Export of cotton bonded for subsequent disinfection.*—With the approval of the Federal Horticultural Board, cotton which has been entered in bond for subsequent disinfection may be sold for immediate shipment to a foreign consignee prior to its disinfection. In applying for the authority to make such

⁹ For restrictions on mail entry of cotton, see Regulation 2, paragraph (f).

shipment, the permittee should indicate the route, if within the United States, over which it is intended to ship the cotton. Specific authority must be secured for each shipment of this character, and the notice of shipment required in regulation 7 must also be submitted. The discharge of the bond covering such cotton will be made on receipt from the shipper in this country of a copy of the bill of lading covering the shipment.

(e) *Entry of cotton and other products from Canada.*—Cotton and other products offered for entry under these regulations from Canada shall be shipped in bond to Boston or New York for entry and disinfection: *Provided*, That grades of cotton or cotton waste, the disinfection of which is not required as a condition of entry (see proviso, regulation 6), and burlap or other fabric of the kinds ordinarily used to wrap cotton, subject if necessary to the conversion requirement of regulation 11, may be shipped in bond to Boston, New York, Philadelphia, or Baltimore.

If cotton waste, so offered for entry at such ports, should prove upon inspection to be of a grade requiring disinfection, it must either be transferred promptly to a port where compliance with the disinfection requirement can be made, which transfer and its routing must in each instance be authorized by the board, or it must be removed forthwith from the port and the territorial waters of the United States.

(f) *Importation of cotton by mail restricted.*—An order issued by the Post Office Department, as amended November 18, 1922, prohibits the importation by mail from any foreign country of raw or unmanufactured cotton, cottonseed (including seed cotton), and cottonseed hulls, with the exception that samples of cotton and cotton waste may be imported by parcel post when the packages are addressed to the United States Department of Agriculture, Federal Horticultural Board, either at Washington, D. C., or at the Ferry Building, San Francisco, Calif. The name and address of the ultimate consignee should be indicated inconspicuously at the left and below the main address. Upon the receipt of the parcels at the inspection offices of the Federal Horticultural Board, either at Washington or at San Francisco, they will be examined and, if necessary, disinfected and forwarded to the ultimate consignee. The costs, if any, of the disinfection must be met by the importer.

Regulation 3.—Permits for Entry.

On approval of an application for the importation of cotton a permit will be issued. One copy will be furnished to the applicant; one copy will be mailed to the collector and one copy to the inspector at each port of entry involved; and a copy will be filed with the application.

Regulation 4.—Marking a Condition of Entry.

Every bale or other container of cotton offered for entry shall be plainly marked with such bale numbers and other marks as will distinguish the bales or containers from each other.

Regulation 5.—Notice of Arrival by Permittee.

Immediately upon the arrival of the cotton at the port of entry the permittee shall submit, in duplicate, notices to the Secretary of Agriculture, through the collector of customs on forms provided for that purpose, stating the number of the permit, the number of bales or other containers of cotton included in the shipment, the bale or container numbers and marks, the country and locality where grown, the name and address of the exporter or shipper, the port of departure, the date of arrival, the customs entry number, and, if transported by water, the name of the ship or vessel and the designation of the dock where the cotton is to be landed, and, if by rail, the name of the railroad company and the terminal where the cotton is to be unloaded.

(a) *Notice of arrival to cover all cotton shown on bill of lading.*—In submitting the notices of arrival required by regulation 5 the permittee will list all the cotton which is expected on the vessel in question as shown by the bill of lading, whether or not the cotton so listed actually arrives on the boat on which it is expected. This makes it unnecessary to report the cotton as listed on the ship's manifest, or to determine by actual inspection whether all the cotton reported on the bill of lading has been shipped.

(b) *Notice of arrival of short shipments.*—In the case of short shipments the permittee must continue to submit the notices of subsequent arrival of the cotton listed in the original bill of lading, indicating the permit and customs entry numbers covering the original entry and the name of the disinfection plant to which the cotton will be sent for disinfection.

Regulation 6.—Disinfection a Condition of Entry.

Imported cotton must be disinfected, as a condition of entry, to the satisfaction and under the supervision of the inspector. Such cotton may be delivered to the permittee for such disinfection within the limits of the port of entry, upon the filing with the collector of customs of a bond in the amount of \$5,000, or in an amount equal to the invoice value of the cotton if such value be less than \$5,000, with approved sureties, conditioned upon such disinfection and upon the redelivery of the cotton to the collector of customs within 40 days from arrival of the same at the port of entry. The cotton shall not be moved from the limits of the port of entry nor shall any bale or other container thereof be broken or opened for sampling until so authorized by an inspector: *Provided*, That cotton which has been so manufactured as to have eliminated all seed, including cotton known as card strips and thread waste and other cotton which can be determined as having been so manufactured or which has been so processed by bleaching or dyeing as to have destroyed all insect life, and which is covered with wrappings which have not previously been used to cover cotton or which is covered with American cotton bagging, commonly known as coarse gunny, which has been used to cover cotton grown in the United States only, will be inspected on arrival at the port of entry and, if found to comply as to grade and wrappings, with the requirements of this proviso and with the marking conditions required in regulation 4, will be released from further restriction under these regulations.

Upon completion of disinfection of imported cotton in compliance with this regulation, such cotton shall be marked under the supervision of an inspector indicating such disinfection and may thereafter be distributed, forwarded, or shipped without restriction under these regulations. Cotton held by a permittee for disinfection under the 40-day provision of this regulation must be stored under conditions approved by an inspector.

(a) *Permittee responsible for disinfection of cotton.*—The permittee is charged with full responsibility for the disinfection of the cotton within the 40-day period regardless of any sale or change of ownership. In other words, so far as responsibility for the disinfection of imported cotton is concerned, the board deals with the permittee only, subsequent receivers of the cotton from the permittee not being parties to the bond given for its disinfection.

(b) *Cotton must not be removed from port of entry prior to disinfection.*—Cotton or cotton waste, not falling within the proviso to regulation 6, arriving at a port where facilities for the disinfection of cotton are available, must not be removed from that port until it has been disinfected. (See Reg. 2, par. (b).)

Regulation 7.—Notice of Shipment of Undisinfected Cotton by Permittee.

If, prior to disinfection of the cotton, the permittee desires to ship it out of the United States under authority of either paragraph (c) or (d) of regulation 2, or to move it for approved storage, pending disinfection under the 40-day provision of regulation 6, for each separate shipment or consignment thereof, the permittee shall notify the Secretary of Agriculture on forms provided for that purpose, stating the number of the permit, the date of entry, the customs entry number, the name and address of the consignee to whom it is proposed to forward the cotton, the number of bales or other containers included in the shipment, and the bale or container numbers and marks, together with the probable date of delivery for and route of transportation. This notice must be submitted in duplicate to the inspector at the port of entry before removal of the undisinfected cotton.

Regulation 8.—Licenses Required for Disinfection Plants.

Any person, firm, or corporation desiring to engage in the disinfection of cotton or other products the disinfection of which is required under these regulations must secure a license from the Secretary of Agriculture. To secure such a license, application should be made on forms provided for that purpose.

Regulation 9.—Return to the United States of Cotton Previously Exported Therefrom.

The foregoing regulations apply to all cotton offered for entry irrespective of the country where grown: *Provided*, That cotton grown in the United States, if in its original containers, may be admitted under permit without disinfection on compliance with regulations 2, 3, 4, and 5, when evidence is submitted satisfactory to the Federal Horticultural Board that such cotton was grown in the United States and its entry, in the judgment of the Federal Horticultural Board, does not involve danger to the cotton cultures of the United

States:¹⁰ *Provided further*, That foreign cotton may be reentered into the United States under permit and without further disinfection on compliance with regulations 2, 3, 4, and 5, if in its original containers, when evidence is submitted satisfactory to the Federal Horticultural Board that the cotton was previously imported into the United States, disinfected under the provisions of these regulations, and was subsequently moved from the confines of the United States.

(a) *Nature of evidence.*—Applications for authority to enter without disinfection cotton falling under the provisos to regulation 9 should be accompanied by evidence consisting of copies of the bills of lading covering the shipment of the cotton to the foreign country, showing the marks and numbers on the bales, with a statement that the cotton is being returned in its original containers, and any other information which will aid the board in determining whether the cotton is entitled to the benefit of either of the provisos to this regulation. Cotton which has been rebaled if returned must make full compliance with the disinfection requirements of these regulations.

Regulation 10.—Restrictions Governing the Entry of Cotton from Imperial Valley, Lower California, Mexico.

Cotton grown in the Imperial Valley in the State of Lower California, Mexico, shall be subject to all the requirements of these regulations: *Provided*, That such cotton will be admitted and may be distributed, forwarded, or shipped without restriction as long as it shall be determined by the Federal Horticultural Board that the pink bollworm does not exist in the State of Lower California, Mexico, and that effective quarantine measures are being maintained by the proper Mexican authorities prohibiting the entry into Lower California of cottonseed, seed cotton, cottonseed hulls, and cotton, baled or unbaled, grown in other parts of Mexico or in foreign countries other than the United States.

Permits for the entry of cotton grown in the Imperial Valley in the State of Lower California, Mexico, may be refused and existing permits revoked whenever it shall be determined by the Federal Horticultural Board that the provisions of the foregoing proviso are not being satisfactorily maintained.

Regulation 11.—Importation of Secondhand Burlap or Other Fabric Which Has Been Used or of the Kinds Ordinarily Used for Wrapping Cotton Subject to Restrictions.

Secondhand burlap or other fabric, under whatever name or trade designation, of the kinds ordinarily used for wrapping cotton shall be subject to all requirements of these regulations: *Provided*, That material covered by this regulation may be permitted entry under permit without disinfection under conditions prescribed by the Federal Horticultural Board, when it is shown to the satisfaction of the board that the material will be treated promptly in such a manner as will be equivalent to disinfection: *Provided further*, That secondhand or used burlap or other fabric of the kinds ordinarily employed for the wrapping of cotton but which has not been so used, and American cotton bagging, commonly known as coarse gunny, which has been used to cover cotton grown in the United States only, may be admitted under permit without disinfection.

(a) *New or unused stock not covered by this regulation.*—This regulation does not apply to new or unused burlap or other fabric of the kinds ordinarily employed to wrap cotton.

(b) *Conditions of entry under first proviso.*—The prompt conversion into paper or other approved treatment of material falling under this regulation will be considered the equivalent of disinfection, and material to be so converted or treated will be classed as falling under the first proviso to this regulation when its movement to the place of conversion or treatment will involve no risk to the cotton cultures of the United States. Upon approval of the process of conversion or treatment and of the movement involved and on receipt of an agreement to comply with the prescribed safeguards, a license will be issued. Full instructions governing the conditions of entry without disinfection under the first proviso to this regulation may be obtained upon application to the Federal Horticultural Board.

(c) *Conditions of entry under second proviso.*—The second proviso covers (1) the entry of secondhand or used burlap or other fabric of the kinds

¹⁰ *Cotton grown in quarantined areas in the United States.*—Cotton grown in the United States in areas quarantined on account of the pink bollworm or other insect pests of cotton and offered for entry into the United States, unless disinfected prior to export, must meet the conditions of these regulations applying to foreign cotton.

ordinarily employed in wrapping cotton, but which has not been so used, and (2) American cotton bagging, commonly known as coarse gunny, which has been used to cover cotton grown in the United States only. Under this proviso, therefore, the entry of secondhand cotton wrappings without disinfection is strictly limited to American cotton bagging, commonly known as coarse gunny, which has been used to cover cotton grown in the United States only. The entry without disinfection of other secondhand or used burlap or other fabric of the kinds ordinarily employed in wrapping cotton is limited strictly to such fabrics as have never been used as cotton wrappings.

(d) *Mixed bales containing objectionable material must be disinfected or treated by approved equivalent method.*—In the case of American cotton bagging or coarse gunny which has been used to cover cotton grown in the United States only, if there appear attached to such gunny patches of the finer burlaps or gunnies when it is apparent that such finer materials are strictly in the nature of patches and represent such an inconsiderable proportion as not to affect the character of the bale as a whole, disinfection or approved equivalent treatment may not be required. This ruling does not apply, however, to bales of a mixed character which contain both American cotton bagging or coarse gunny which has been used to cover cotton grown in the United States only and the finer burlaps and gunnies, whether these latter have or have not been used as cotton wrappings. It is deemed thoroughly impracticable to determine by external inspection with any degree of accuracy the history of the finer gunnies in such mixed bales, and the disinfection of such bales, or approved equivalent treatment, will be required. Importers are therefore advised that the classes of burlaps, gunnies, etc., which may be entered without disinfection, or approved equivalent treatment, must be baled separately to secure the advantage of such entry.

(e) *Classification of bagging in regard to disinfection.*—The classes of burlaps or other fabrics referred to may be listed as follows:

(1) Secondhand or used burlap or other fabric of the kinds ordinarily employed in wrapping cotton but which has not been so used. Disinfection not required.

(2) American cotton bagging, commonly known as coarse gunny, which has been used to cover cotton grown in the United States only. Disinfection not required.

(3) Cotton wrappings other than those included in class 2. When utilized under conditions prescribed by the Federal Horticultural Board, disinfection not required.

(4) All cotton wrappings not included in classes (2) and (3). Disinfection required.

Regulation 12.—Revocation of Permits and Licenses.

Permits and licenses may be refused, and existing permits and licenses revoked, for violation of any of the provisions of these regulations.

The above rules and regulations are hereby adopted and shall supersede the rules and regulations governing the importation of cotton into the United States (revised), which were promulgated July 18, 1917, to take effect on and after August 1, 1917.

Done at the city of Washington this 24th day of February, 1923.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.]

HENRY C. WALLACE,
Secretary of Agriculture.

SUPPLEMENTAL INSTRUCTIONS.

COTTON SAMPLES.

(a) *Imported cotton samples should be listed on ship's manifest as "Cotton samples" and should be packed separately.*—It has occasionally happened that cotton samples received by various permittees have been listed on the ship's manifest as "samples," such cotton sometimes being included in the same container with samples of other merchandise, so that it is impossible for the inspector to determine from the ship's manifest whether or not the cargo contains material requiring disinfection. In one instance it was found that a case of samples was entered at a Pacific port along with a number of cases of egg-yolk powder, and since there was nothing on the ship's manifest or the entry papers to indicate the presence of cotton in the shipment, it was allowed

to go forward in bond to Chicago. Upon examination at the latter point it was found that the case contained, among other samples, a package of raw cotton, which, under the circumstances, it was necessary to forward in bond to New York for disinfection and final entry.

(b) *Importers should instruct shippers regarding packing and listing of samples.*—Importers of cotton are requested to instruct their foreign shippers to pack cotton samples separately, and not to include them in a package or crate with other merchandise. The samples should be listed on the ship's manifest as "Cotton samples," so that upon arrival at the port of entry the inspector may be advised of their presence in the ship's cargo.

(c) *Entry of cotton samples not so listed or packed with other material to be refused.*—The entry of samples in the irregular manner indicated above does not comply with the conditions of entry prescribed by the cotton regulations, and, hereafter, entry will be refused to samples arriving in this manner. Any attempt to enter cotton samples under any other designation than "Cotton" or to enter cotton packed in the same container with other material may lead to the necessity of revoking permits.

WASTAGE.

A very considerable amount of leakage or wastage occurs in the process of unloading and handling foreign cotton on the docks, transportation to disinfection plants, in storage pending disinfection, and in the disinfection plants themselves pending disinfection.

Such waste is especially noteworthy in the case of Mexican cotton. This cotton is inadequately hooped with iron over an insufficient wrapper of coarse sisal-fiber netting, in most instances but a few shreds of this netting remaining. The bales themselves become merely ragged masses of cotton of such character that the wastage in handling is constant and enormous. In view of the fact that Mexico is known to be infested with the pink bollworm, this condition of the bales adds a very large new element of risk. The instructions here given apply, however, to all wastage from imported cottons.

(a) *Care should be exercised in handling cotton to avoid waste.*—Permittees and persons in charge of disinfection plants are urged to use great care in the handling of cotton to avoid waste, and are instructed to provide for the prompt and regular collection of such waste on the docks or other places of unloading and between such places of landing or unloading and the disinfection plants or places of temporary storage in such plants or elsewhere, including the sweeping of cars and clean-up of outdoor areas where such wastage may occur in the process of handling, and all wastage in disinfection plants.

(b) *Mixed wastage coming from undisinfected foreign cotton and American cotton or disinfected foreign cotton to be treated as undisinfected.*—If undisinfected foreign cotton is stored with American or disinfected foreign cotton pending disinfection, all wastage from such storage places must necessarily be treated as undisinfected foreign cotton and therefore become subject to the restrictions herein set forth. Leakage from disinfected and undisinfected cotton occurring in disinfection plants must be treated as undisinfected foreign cotton subject to the restrictions herein set forth.

(c) *Baling, marking, and disinfection of wastage required.*—All such wastage must be properly bagged or baled and must be disinfected promptly. The bags, bales, or other containers must be marked with such marks and numbers as will distinguish them from each other and indicate the disinfection plant or place of collection and that the material contained is such collected waste.

(d) *Notice of collection of wastage.*—Notice of collection of such wastage with full description must be made in duplicate to the inspector at the port of entry on a form corresponding to the notice of arrival of cotton (regulation 5). Notification should be made weekly, where practicable, and in no case should report of collection of a bag or bale of wastage be delayed more than a month.

(e) *Cleaning of lighters, cars, trucks, etc., used for transporting imported cotton.*—Lighters, cars, trucks, or other means of conveyance used for the transportation of cotton from landing docks to disinfection plants must be thoroughly swept out immediately upon unloading and the sweepings either burned or collected and disinfected.

(f) *Compliance to be under supervision of inspector.*—Compliance with the conditions outlined above is to be made under the supervision of an inspector.

RESTRICTIONS ON ENTRY OF IMPORTED COTTON AND COTTON WRAPPINGS SIMPLIFIED.

(Press notice.)

FEBRUARY 26, 1923.

The restrictions on the entry of foreign cotton and cotton wrappings will hereafter be limited substantially to the disinfection requirements at port of entry, the United States Department of Agriculture announced to-day. After such disinfection, cotton and cotton wrappings will be unrestricted as to movement and utilization by any person or mill so far as the Department of Agriculture is concerned and all existing mill and other licenses will be canceled other than as to the disinfection plants at port of entry.

The permit for the importation of these products has also been very much simplified. Hereafter a single permit will authorize the permittee to enter these products at any port approved by the Federal Horticultural Board for the particular product concerned and for any exporter in any foreign country. These modifications of the restrictions are offset by a somewhat increased strength of fumigation at the port of arrival.

These and other minor changes are embodied in the Revision of the Rules and Regulations Governing Importation of Cotton and Cotton Wrappings into the United States, approved February 24, by the Secretary of Agriculture.

For the convenience of permittees and others the explanatory notes which were incorporated under the regulations in the latest edition (July 18, 1917) have been retained in this new edition with such omissions and modifications as were necessitated by the changes in the regulations referred to above, or as seemed otherwise desirable.

MILL USE OF FUMIGATED COTTON SUBSTANTIALLY WITHOUT RISK.

HB-163.

FEBRUARY 23, 1923.

The fumigation with hydrocyanic-acid gas of all cotton entering the United States has been required now for the past six years, and the board believes that in the ordinary mill use of such cotton there is no risk whatever of injury to employees, and no complaints have been received from any mills of any ill effects from such cotton.

The only possible risk from the utilization of fumigated cotton would be in the rooms for initial opening or perhaps also in tightly constructed storage rooms where a considerable number of bales are stored. As already indicated, the risk in connection with mills and storage companies handling such cotton is apparently negligible, but to eliminate all possibility of risk, adequate ventilation in storage and opening rooms should be provided. The fact that the disinfecting gas is lighter than air will cause any of it which may escape from the cotton to accumulate at the top of the room or storage place and ventilation provided for should take this into account. Such ventilation can be effected by means of windows or by exhaust fans.

In the board's experimental disinfection laboratory in Washington, where various kinds of gases are being constantly experimented with and used, exhaust fans have given excellent results and prevented any ill effects whatever to the experts engaged in the experiments

C. L. MARLATT,

Chairman Federal Horticultural Board.

HYDROCYANIC-ACID GAS FUMIGATION OF COTTON AND COTTON WRAPPINGS AS CONDITION OF ENTRY.

HB-164.

MARCH 1, 1923.

The following directions for the disinfection of cotton and cotton wrappings as a condition of entry into the United States supersede the directions given in HB-42 of March 22, 1916, and in the supplement thereto of March 22, 1920. These revised directions are subject to such modifications with respect to any particular shipment as may be deemed necessary by the inspector to secure adequate safety.

Disinfection by fumigation.—Cotton and other products requiring disinfection under these regulations must be disinfected in a suitable chamber by fumigation with hydrocyanic acid gas generated by combining sodium cyanid with diluted sulphuric acid, or by the use of liquefied hydrocyanic-acid gas.

HYDROCYANIC-ACID GAS PRODUCED IN A GENERATOR.

Chemicals required for fumigation with hydrocyanic-acid gas by the generator method.—Cyanid: The only cyanid available for fumigation purposes at the present time is sodium cyanid, and this grade must be guaranteed to contain not less than 50 per cent cyanogen. In the event that potassium cyanid should become available in the future, specific directions for its use will be furnished.

Sulphuric acid: Commercial sulphuric acid, 66° B., which is approximately 93 per cent pure, must be employed.

How to prepare a concentrated solution of sodium cyanid.—To expedite the generation of the gas the cyanid should be brought to a concentrated solution prepared by dissolving sodium cyanid in water at the rate of 200 pounds of cyanid to 50 gallons of water. (This will increase the volume of the liquid approximately 25 per cent.) Each 22.5 fluid ounces of this solution contains 9 ounces avoirdupois of sodium cyanid.

Formula to be employed.—All cotton and other products requiring disinfection under these regulations if disinfected by this process must be fumigated at the rate of 9 ounces avoirdupois sodium cyanid per 100 cubic feet of chamber space. The formula to be employed is as follows: For each 100 cubic feet of space use 22.5 fluid ounces sodium-cyanid solution prepared as indicated above, 9 fluid ounces sulphuric acid, and 9 fluid ounces of water.

Fumigation chamber.—The fumigation chamber must be so constructed that it will support a 25-inch vacuum for not less than 15 minutes. Each fumigation chamber must be provided with two vacuum gauges, one of which must be a self-recording gauge.

Generator.—The generator must be acid proof and provided with the necessary inlets for the introduction of the chemicals. A suitable pipe for the conduction of the gas must extend from the generator to the fumigation chamber. The necessary cut-off valves must be provided, as well as such safety devices as may seem necessary. It is advisable to attach a combination vacuum and pressure gauge to the generator.

Length of exposure.—All cotton and other products must be exposed to the gas for two hours, including the period of generation of the gas.

Method of procedure.—The material to be fumigated must be placed in the fumigation chamber, the doors closed and clamped, and the air exhausted until the gauge registers 25 inches. At this stage the gas should be generated by introducing into the generator the chemicals previously described, in the following order: Water, acid, and cyanid in solution. The valve separating the generator and fumigation chamber must be opened either before or as soon as the cyanid solution begins to flow into the generator. The cyanid solution should be run in at such a rate that it will require from 8 to 10 minutes for all of the solution to be introduced. At the expiration of 15 minutes air must be permitted to pass through the generator for 5 minutes, to wash out all of the gas in the generator, and then the valve separating the fumigation chamber and the generator should be closed. At this stage the air valve on the fumigation chamber should be opened and the air allowed to rush in until the gauge on the fumigation chamber falls to 5 inches; the bales must be held in the presence of the gas and air for 1 hour and 40 minutes additional, completing the required exposure of 2 hours.

At the completion of the exposure, to remove the mixture of gas and air from the cotton, a vacuum of at least 25 inches should be produced in the fumigation chamber. As soon as the required vacuum is reached, the valve separating the pump from the fumigation tank should be closed and air allowed to enter until normal atmospheric pressure is obtained in the fumigation chamber. If the bales are compressed by steam or hydraulic pressure, this should be followed by a 15-inch vacuum, which should be immediately broken by admitting outside air. If, on the other hand, the material being fumigated is in flat or uncompressed bales, this second exhaustion must not be performed and, if necessary for the safeguarding of any particular shipment, additional fumigation will be required. As the air enters the fumigation chamber, the pump should be kept running a sufficient length of time to remove an amount of air twice the volume of the chamber. The pump is then to be temporarily stopped until

the doors of the fumigation chamber are opened and again started and kept running while the fumigated bales are being removed.

LIQUEFIED HYDROCYANIC ACID GAS.

Liquefied hydrocyanic acid gas.—Liquefied hydrocyanic acid gas employed in the fumigation of the cotton or other products requiring disinfection under these regulations must maintain a purity of 95 per cent or over, and be exempt from alkali salts, ammonia, hydrochloric acid, nitric acid, and free chlorine.

Formula to be employed.—Cotton or other products requiring disinfection under these regulations, if disinfected by this process, must be fumigated at the rate of 116 grams (4 ounces avoirdupois) of the liquefied hydrocyanic-acid gas per 100 cubic feet of chamber space.

Exposure.—All cotton or other products must be held in the presence of the gas for two hours, including the period of volatilization.

Method of procedure.—The liquefied hydrocyanic-acid gas must be introduced into the fumigatorium in such a manner as to insure immediate and complete volatilization. After all of the required liquid has been introduced into the chamber, the outside air should be allowed to pass through the gas inlet for a period of 5 minutes in order to perfect the volatilization of any residual liquid. The gas-inlet valve should then be closed and the vacuum of the chamber reduced to 5 inches and maintained to the end of the exposure. At the completion of the exposure, the gas is to be removed from the fumigation chamber in the manner previously described in the last paragraph under "Hydrocyanic-acid gas produced in a generator."

PRECAUTIONS.

In addition to providing the plant with all necessary precautions in the form of blow-off valves, etc., it is desirable as a precaution to keep on hand for immediate use certain antidotes. If the gas is inhaled to a dangerous amount, the person so affected should be immediately removed to the fresh air, and if possible, kept walking. The stimulation of deep breathing by cautious inhalation of aromatic spirits of ammonia or dilute ammonia water is beneficial. In severe cases where respiration has apparently ceased or has been seriously affected, employ artificial respiration at once. Loosen the clothing around the neck and chest; dash cold water on the head and face. In such instances, medical attention should be immediately sought.

Standard army gas masks with proper fillers are now available and are satisfactory for the purpose intended, provided the canisters containing the absorbent material are renewed at intervals as recommended by the manufacturers.

Companies operating vacuum cotton fumigation plants are expected to provide adequate means for ventilating the room in which the tank is situated and where fumigated cotton may be temporarily stored.

E. R. SASSCER,

Entomologist in Charge.

Plant Quarantine Inspection Service.

Approved:

C. L. MARLATT,

Chairman Federal Horticultural Board.

FUMIGATION OF IMPORTED COTTON AT PORTLAND, OREG., AUTHORIZED.

The board is in receipt of advice under date of March 20, 1923, to the effect that the inspector in charge at Portland, Oreg., had completed a successful test of a fumigation plant erected at that port for the disinfection of cotton. The completion of this plant enables the department to permit the entry at Portland, Oreg., of cotton which it has been necessary heretofore to forward in bond by water from that port to San Francisco, Seattle, or some other port possessing adequate facilities to carry out the disinfection and final entry.

In addition to Portland, Oreg., plants for the disinfection of imported cotton are now available at Boston, New York, Newark, San Francisco, and Seattle.

EXTENSION OF WHITE PINE BLISTER RUST QUARANTINE.

Amendment of Notice of Quarantine No. 54.

[Effective on and after March 2, 1923.]

In accordance with Notice of Quarantine No. 54, on account of the white pine blister rust, issued by the Secretary of Agriculture March 1, 1922, under the authority conferred by the plant quarantine act of August 20, 1912 (37 Stat. 315), as amended by the act of Congress approved March 4, 1917 (39 Stat. 1134, 1165), notice is hereby given that the provisions of said Quarantine No. 54 are extended to cover the entire State of Washington, and the Secretary of Agriculture does order that on and after March 2, 1923, no five-leaved pines and no currant or gooseberry plants (*Ribes* and *Grossularia*) shall be moved or allowed to be moved interstate from the said State of Washington.

This extension is necessitated by the promulgation by the Director of Agriculture of the State of Washington of Quarantine Order No. 12, effective September 1, 1922, amending Quarantine Order No. 7, effective March 1, 1922, so as to permit intrastate movement of all currants (except cultivated black currants—*Ribes nigrum*) and gooseberries from licensed and inspected nurseries. Quarantine Order No. 7, referred to, corresponded, as to designation of infested territory in that State and as to prohibition of movement of currants and gooseberries therefrom, with Federal Quarantine No. 54. The amendment (Order No. 12) permitting the movement throughout the State of currants and gooseberries from the infested district—the territory west of the Cascade Mountains—leaves the control now exercised by the State, even under the safeguards provided in the order, in the judgment of the Secretary of Agriculture, inadequate to prevent the spread of the white pine blister rust throughout the State, and it therefore becomes necessary to extend the provisions of the Federal quarantine to the entire State.

Done at the city of Washington this 2d day of March, 1923.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.]

HENRY C. WALLACE,
Secretary of Agriculture.

WHITE PINE BLISTER RUST QUARANTINE TO COVER ENTIRE STATE OF WASHINGTON.

(Press notice.)

MARCH 7, 1923.

By order issued March 2, 1923, Secretary of Agriculture Wallace has extended Blister Rust Quarantine No. 54 to cover the entire State of Washington. This action is taken to prevent the spread of the white pine blister rust from Washington into other States, and for this purpose the order prohibits the interstate movement out of Washington of five-leaved pines and of currant and gooseberry plants. The extension of the Federal quarantine is necessitated by the promulgation by the director of Agriculture of Washington of State Quarantine Order No. 12, effective September 1, 1922, and amending State Quarantine Order No. 7, effective March 1, 1922, so as to permit the intrastate movement from licensed and inspected nurseries of all currants (except cultivated black currants) and gooseberries from the territory hitherto under quarantine west of the Cascade Mountains. This action leaves the control now exercised by the State, in the judgment of Secretary Wallace, inadequate to prevent the spread of the white pine blister rust from the infected district west of the Cascade Mountains throughout the State, making it necessary to extend the provisions of the Federal quarantine to the entire State.

The promulgation of Federal Quarantine No. 54, which became effective March 15, 1922, followed the discovery by agents of the United States Department of Agriculture, of several blister rust infestations, principally on black currants in the Puget Sound region of Washington. Much concern was felt over the possibility of the disease spreading to the valuable commercial stand of western white and sugar pine forests of the Rocky Mountains and Pacific coast regions.

WHITE PINE BLISTER RUST QUARANTINE TO COVER ENTIRE STATE OF WASHINGTON.

POST OFFICE DEPARTMENT,
THIRD ASSISTANT POSTMASTER GENERAL,
Washington, March 19, 1923.

Postmaster.

MY DEAR SIR: Quarantine Order No. 54, quarantining certain counties in the State of Washington on account of the white pine blister rust (*Cronartium ribicola* Fischer), issued by the United States Department of Agriculture under authority of the plant quarantine act, has been extended, effective March 2, 1923, by order of the Secretary of Agriculture to cover the entire State of Washington.

Under this order, as extended, the movement of the following trees and plants from the State of Washington is absolutely prohibited:

All five-leaved pines.	Swiss stone pine (<i>P. cembra</i> , <i>pumila</i> , <i>sibirica</i> , <i>coronans</i>).
White pine (<i>Pinus strobus</i>).	Himalayan or Bhotan pine (<i>P. excelsa</i> , <i>nepalensis</i> , <i>griffithii</i>).
Western white or silver pine (<i>P. monticola</i>).	Korean pine (<i>P. koraiensis</i> , <i>mandschurica</i>).
Sugar pine (<i>P. lambertiana</i>).	Japanese white pine (<i>P. parviflora</i> , <i>pentaphylla</i> , <i>morrisonicola</i> , <i>formosana</i>).
Limber pine (<i>P. flexilis</i>).	Chinese white pine (<i>P. armandi</i> , <i>scipioniformis</i> , <i>mastersiana</i>).
White-bark pine (<i>P. albicaulis</i>).	Balkan pine (<i>P. peuce</i>).
Bristle-cone pine (<i>P. aristata</i>).	Currant and gooseberry plants.
Foxtail pine (<i>P. balfouriana</i>).	
Mexican white pine (<i>P. strobiformis</i>).	
Ayacahuite pine (<i>P. ayacahuite</i> , <i>veitchii</i> , <i>bonapartei</i> , <i>loudoniana</i>).	

In accordance with the provisions of paragraph 1, section 478, Postal Laws and Regulations, you will refuse to accept for mailing to places outside the State of Washington parcels containing any of the trees or plants prohibited by Quarantine Order No. 54.

Sincerely yours,

W. IRVING GLOVER,
Third Assistant Postmaster General.

SAND, SOIL, OR EARTH FROM PORTO RICO AND HAWAII—ACTION POSTPONED.

On March 7, 1922, a public hearing was held by this department to consider the advisability of prohibiting the entry of sand, soil, or earth, with plants or otherwise, from the Territories of Porto Rico and Hawaii into the continental United States. After careful consideration of the facts brought out at this hearing, the conclusion was reached that prohibitions or restrictions on the entry of such sand, soil, or earth are necessary to safeguard against possible entrance from these Territories of injurious insects, especially leaf-feeding beetles, the larvæ of which might be easily introduced with soil. It was further brought out at the hearing that certain plantings of palms in Porto Rico had been made, partly upon the advice of a representative of this department, with the expectation that these palms as potted or balled plants might be sold in the continental United States. In view of the fact that these enterprises were undertaken at a time when there was no thought of restrictions of the kind suggested above, and of the promise of the persons concerned that exceptional precautions would be taken to safeguard these cultures from infestation, it was felt that provision should be made for the marketing of these palms in the United States under inspection and the enforcement of any necessary precautionary measures at the time of entry. It was represented that these enterprises could be brought to completion within two or three years. Subject to any modification of the action which may be later necessitated, the board has decided therefore to defer its recommendation of

quarantine action until a later date, not later, however, than January 1, 1926. Pending such embargo against plants or other articles with soil, all shipments of palms or other plants arriving with soil from Porto Rico and Hawaii will be given thorough inspection and it is understood that the department is authorized to take adequate steps to prevent the entry with such shipments of any dangerous pests, including, if necessary, prohibition of entry of the shipments.

AMENDMENT NO. 2 TO REGULATIONS GOVERNING THE IMPORTATION OF POTATOES INTO THE UNITED STATES (REVISED).

[Effective on and after February 1, 1923.]

Under authority conferred by the plant quarantine act of August 20, 1912 (37 Stat. 315), it is ordered that Regulation 7 of the regulations supplemental to the order of the Secretary of Agriculture issued December 22, 1913, governing the importation of potatoes into the United States, modified by Amendment No. 1 to Regulations Governing the Importation of Potatoes into the United States (Revised), be, and the same is hereby, further amended to read as follows:

Regulation 7.—Special Provision for the Importation of Potatoes from Foreign Countries into Hawaii and Porto Rico, and of Potatoes Grown in the Dominion of Canada and Bermuda, the States of Chihuahua and Sonora, and the Imperial Valley of the State of Lower California, Mexico, into the United States.

Potatoes from any foreign country may be imported into the Territories of Hawaii and Porto Rico for local use only, free of any restrictions whatsoever, until otherwise ordered, under the plant quarantine act of August 20, 1912.

Potatoes grown in the Dominion of Canada and Bermuda may be imported into the United States without permit when accompanied by a certificate issued by a duly authorized officer of the country concerned indicating the district or locality where grown and apparent freedom from injurious potato diseases and insect pests. Such importations shall be subject to such inspection on arrival as may be required by the United States Department of Agriculture.

Potatoes may be imported from the States of Chihuahua and Sonora, and the Imperial Valley of the State of Lower California, Mexico, into the United States, subject only to the following conditions and restrictions:

(a) Persons contemplating the importation of potatoes from the States of Chihuahua and Sonora, and the Imperial Valley of the State of Lower California, Mexico, shall first make application for a permit, in the manner and form as prescribed in Regulation 3, and upon approval by the Secretary of Agriculture of such application a permit will be issued.

(b) Importations from the States of Chihuahua and Sonora, Mexico, will be permitted entry only through the ports of El Paso, Tex., and Douglas, Naco, and Nogales, Ariz., respectively.

(c) Importations from the Imperial Valley of the State of Lower California, Mexico, will be permitted entry only through the port of Calexico, Calif.

(d) The requirements contained in Regulation 6 in regard to the sending of notice of arrival of shipment shall be complied with by the permittee.

(e) No shipment of potatoes from the States of Chihuahua and Sonora and the Imperial Valley of the State of Lower California, Mexico, will be permitted entry until it has been examined by an inspector of the United States Department of Agriculture and found, or believed to be, free from dangerous potato diseases and insect pests.

This amendment, which supersedes Amendment No. 1 to Regulations Governing the Importation of Potatoes into the United States (Revised), which became effective June 20, 1922, is hereby adopted and shall be effective on and after February 1, 1923.

Done at the city of Washington this 17th day of January, 1923.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.]

HENRY C. WALLACE,
Secretary of Agriculture.

CERTIFICATION REQUIRED OF POTATOES FROM CANADA AND BERMUDA.

(Press notice.)

JANUARY 20, 1923.

Regulation 7 of the Rules and Regulations Governing the Importation of Potatoes into the United States has been amended, effective February 1, 1923, so as to require certification of potatoes offered for entry into the United States from the Dominion of Canada and Bermuda for the purpose of indicating apparent freedom from injurious potato diseases and insect pests and, more particularly in relation to Canada, of indicating the district or locality where grown. The purpose of such indication of district or locality with respect to Canada is due to the fact of the known occurrence within recent years of potato wart in certain districts in Canada. While these districts are not important as potato producing and exporting centers, nevertheless, to make sure that no potatoes grown in these districts are offered for import into the United States, it seems desirable to require certification as to district or locality of origin and, in connection with such certification, it seems also desirable to have the certification of apparent freedom from diseases and pests. There is no purpose in this amendment to place any material bar on the importation of sound potatoes from districts not under suspicion from Canada or from Bermuda, but the purpose is merely to safeguard against possible entry of diseases with such potatoes.

Provision is also made for inspection on arrival of the potatoes in the United States at the option of the Department of Agriculture, and it is proposed to make such inspection from time to time sufficient to indicate compliance with the regulation.

The paragraphs of Regulation 7 relating to the importation of potatoes from portions of Mexico remain unchanged.

The revised wording of the regulations with respect to Canada and Bermuda is as follows:

"Potatoes grown in the Dominion of Canada and Bermuda may be imported into the United States without permit when accompanied by a certificate issued by a duly authorized officer of the country concerned indicating the district or locality where grown and apparent freedom from injurious potato diseases and insect pests. Such importations shall be subject to such inspection on arrival as may be required by the United States Department of Agriculture."

WITHDRAWS RESTRICTIONS ON IMPORT OF POTATOES FROM CANADA AND BERMUDA.

FEBRUARY 13, 1923.

The United States Department of Agriculture to-day issued the following notice of the withdrawal of restrictions on the importation of potatoes from Canada and Bermuda other than such inspection as shall be deemed necessary from time to time:

AMENDMENT NO. 2 TO REGULATIONS GOVERNING THE IMPORTATION OF POTATOES INTO THE UNITED STATES WITHDRAWN.

Notice is hereby given of the withdrawal of Amendment No. 2 revising the paragraph governing the entry of potatoes into the United States from Canada and Bermuda in Regulation 7 of the Regulations Governing the Importation of Potatoes into the United States. This amendment was promulgated January 17, 1923, and was to become effective February 1, 1923, and provided for official certification of the potatoes as to district of origin and as to freedom from injurious diseases and insect pests. The withdrawal of this amendment leaves without restriction the entry of potatoes from Canada and Bermuda other than such inspection as shall be deemed to be necessary from time to time to determine the freedom of such imports from injurious diseases and insect pests. The Federal Horticultural Board recommends this action after further consultation with the experts of this department and with the Dominion authorities and in view of a general plan now under consideration to control, under permit and inspection, the entry of all fruits and vegetables from foreign countries.

HENRY C. WALLACE,
Secretary of Agriculture.

SUMMARY OF STATE INSPECTION REQUIREMENTS OF PARCEL POST SHIPMENTS UNDER THE PROVISIONS OF THE ACT OF MARCH 4, 1915.

This legislation was incorporated in the agricultural appropriation act for the fiscal year 1916, and provides, under certain conditions, for terminal inspection of plants and plant products transmitted through the mails, all expenses arising thereunder to be paid by the States concerned. This act protects the States which maintain terminal inspection points against the entry of plant diseases and insect pests, inasmuch as any mail shipments of plants and plant products which can not be satisfactorily freed by disinfection from such diseases or insect pests will be returned to the sender upon his request and at his expense, or, in default of such request, they will be turned over to the State authorities for destruction. [For full text of act and of regulations prescribed thereunder, see pp. 20-22, S. R. A. No. 15 for April 1915.]

The States which have availed themselves of the powers of this act, and the plants and plant products covered, the terminal inspection of which is now required in these States, are indicated in the following summary:

California, Arizona, Montana, Florida, Washington, Arkansas, District of Columbia, Mississippi, Territory of Hawaii, and Utah, in the order named, have provided for terminal inspection of the plants and plant products enumerated below, in accordance with Order No. 8760 of the Postmaster General, dated April 2, 1915, issued under the provisions of the Act of March 4, 1915.

California, Arizona,¹¹ Montana, Washington, Arkansas, Territory of Hawaii, and Utah require terminal inspection of the following plants and plant products, except when they are shipped under certificate of the Federal Horticultural Board:

All florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit pits and other seeds of fruit and ornamental trees or shrubs, and other plants and plant products in the raw or unmanufactured state, except vegetable and flower seeds.

The District of Columbia requires terminal inspection of the same plants and plant products, but makes no exception in the event that they are shipped under the certificate of the Federal Horticultural Board.

The State of Florida requires terminal inspection of the following plants and plant products, except when they are shipped under the certificate of the Federal Horticultural Board:

All trees, plants, shrubs, vines, cuttings, grafts, scions, buds, leaves, roots, fruit pits, and all other seeds of forest, fruit, or ornamental trees or shrubs; all greenhouse, herbaceous, and bedding plants and parts thereof; all blossoms or flowers of orange, lemon, and other citrus plants; all fruits or nuts; all herbarium or dried specimens of plants or parts thereof, and other plants and plant products in the raw or unmanufactured state, except vegetable and flower seeds: *Provided*, That this list of plants and plant products shall not apply to those enumerated below when both the office at which they are mailed and the office to which they are addressed are located in Florida and when the containers thereof are marked to show the nature of contents, as provided by paragraph 1 (b), section 478½, Postal Laws and Regulations:

Cut flowers other than those of citrus plants,

Field crop seeds,

Fruits,

Garden and vegetable plants other than sweet potato draws or slips.

Grains,

Grass seeds,

Nuts,

Vegetables for table use other than sweet potatoes.

The State of Mississippi requires terminal inspection of the following plants and plant products, except when they are shipped under the certificate of the Federal Horticultural Board:

All florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit pits and other seeds of fruit and ornamental trees or shrubs; all

¹¹ Substitutes the words "for propagation" for "in the raw or unmanufactured state."

greenhouse, herbaceous, and bedding plants and parts thereof; all blossoms or flowers of orange, lemon, and other citrus plants; all fruits and nuts; cottonseed; all herbarium or dried specimens of plants or parts thereof, and other plants and plant products in the raw or unmanufactured state, except cabbage, tomato, pepper, and eggplant plants, and vegetable and flower seeds: *Provided*, That this list of plants and plant products shall not apply to those originating in Mississippi and addressed to places in that State which are inclosed in packages plainly marked to show the nature of the contents and accompanied with a certificate from the Mississippi State Plant Board or its duly authorized inspector embodying the information prescribed in paragraph 2, section 478, Postal Laws and Regulations; nor to the following plants and plant products if not accompanied with a State certificate when both the office at which they are mailed and the office to which they are addressed are located in Mississippi:

Cut flowers other than those of citrus plants,

Field crop seeds,

Garden and vegetable plants other than sweet potato draws or slips,

Grains,

Grass seeds,

Nuts,

Vegetables for table use other than sweet potatoes.

SUMMARY OF PENALTIES IMPOSED FOR VIOLATIONS OF FEDERAL PLANT QUARANTINE AND REGULATORY ORDERS TO DECEMBER 31, 1922, INCLUSIVE.

	Year of conviction.	Number of convictions.	Total fines.	Average.
Gipsy moth and brown-tail moth quarantine (domestic).	1914	16	\$390	\$24.37+
	1915	1	25	25.00
	1917	3	75	25.00
	1918	2	45	22.50
	1919	3	30	10.00
	1920	3	60	20.00
	1922	7	230	32.85+
Total.....		35	855	24.42+
White-pine blister-rust quarantine, No. 26 (domestic) ..	1919	1	25	25.00
	1920	1	25	25.00
	1921	36	1,168	32.44+
	1922	16	721	45.06+
Total.....		54	1,939	35.90+
Mediterranean fruit-fly and melon-fly quarantine (domestic).....	1920	1	20	20.00
	1922	1	50	50.00
Total.....		2	70	35.00
European corn-borer quarantine (domestic)	1922	1	25	25.00
Avocado or alligator-pear order (foreign).....	1921	2	5	2.50
Sweet-potato and yam quarantine (domestic).....	1921	1	10	10.00
Sugar-cane quarantine (foreign).....	1922	2	.....	(²)

¹ While one of the violators of this order was fined \$5, the other was sentenced to one hour in the custody of the marshal.

² Both violators of this quarantine were sentenced to 28 days in jail (they had spent this time in jail prior to conviction).

In addition to the above fines, costs were also paid in many cases, but the board has not been advised of the amount of such costs in all cases.

The fewness of the convictions in connection with the enforcement of some 22 foreign and 15 domestic plant quarantines indicates the very general recognition of the need for, and compliance with, the restrictions under these quarantines. This record makes no accounting of the hundreds of interceptions which have been made of small lots of contraband articles brought to the United States for the most part by persons in ignorance of the restrictions on entry of certain plants and plant products, nor of the minor violations in connection with the domestic plant quarantines where violations, often uncompleted, were in most instances in ignorance of the restrictions imposed.

MISCELLANEOUS ITEMS.

CONDITIONS WHICH MUST BE MET IN PLANT EXPORTS TO ENGLAND AND WALES.

HB-160.

JANUARY 8, 1923.

My attention has been called in letter of December 5, 1922, from W. G. Lobjoit, Controller of Horticulture, of the Ministry of Agriculture and Fisheries of England, to the fact that trouble is being occasioned by the arrival of consignments of plants from the United States which come within the destructive insects and pests order of May 31, 1922, and which are improperly certified. In other words, these consignments are accompanied merely by one of the ordinary State nursery certificates indicating inspection on the 1st of June or at some particular period, whereas the order referred to requires as a condition of entry into England and Wales that each consignment must be accompanied by two copies of a certificate, form specified, issued after inspection by a duly authorized official and not more than fourteen days prior to the date of shipment. This is interpreted by Mr. Lobjoit in his letter as "Inspection of the actual consignment at the time of packing." It is highly desirable, therefore, that all persons proposing to ship plants to England and Wales should secure from the appropriate State inspector a certificate of this character.

For the information of inspectors and others, the portion of the destructive insects and pests order of 1922, referred to above, which relates to entry of foreign plants, is attached.

C. L. MARLATT, *Chairman of Board*

THE DESTRUCTIVE INSECTS AND PESTS ORDER OF 1922.

[Extract from the London Gazette of Friday, June 21, 1922.]

1. This order shall come into operation on the first day of July, nineteen hundred and twenty-two.

DEFINITIONS.

2. In this order; "The minister" means the Minister of Agriculture and Fisheries; "Inspector" means an inspector of the Ministry of Agriculture and Fisheries; and the expression "plant" shall, where the context permits, include tree and shrub and the fruit, seeds, tubers, bulbs, layers, cuttings or other parts of a plant.

RESTRICTION ON IMPORTATION OF PLANTS.

3. (1) The landing in England and Wales from any country other than Scotland, Ireland, and the Channel Islands of any of the plants mentioned in the *first schedule* to this order is prohibited except in accordance with the regulations set out in the *third schedule* hereto.

(2) The importer of any plant the landing of which is regulated by this article shall comply with the regulations set out in the *third schedule* hereto.

(3) This article shall not apply to any plant the landing of which is authorized by a general license issued by the minister or by a special license issued by an inspector, or to a consignment of a plant to the minister for experimental or scientific purposes.

(Sections 4 to 12 of the order relate to internal and administrative matters, and are omitted.)

The three schedules promulgated in connection with this order follow:

FIRST SCHEDULE.

(a) All living plants with a persistent woody stem above ground, and parts of the same, except seeds, when for use in propagation—such as fruit trees, stocks, and stools, forest trees, and ornamental shrubs and grafts, layers and cuttings thereof.

(b) All potatoes; and all tubers, bulbs, rhizomes, corms, and hop stocks for planting.

(c) Seeds of onions and of leeks for sowing.

(d) Gooseberries.

SECOND SCHEDULE.

Fungi.

- Black knot of plum and cherry (*Plowrightia morbosa* Sacc.).
 Fire or pear blight (*Bacillus amylovorus* Trev.).
 Chestnut canker (*Endothia parasitica* (Murr) Ander. and Ander.).
 Wart disease or black scab of potatoes (*Synchytrium endobioticum* Perc.).
 Onion and leek smut (*Urocystis cepulae* Frost).
 Downy mildew of hops (*Peronoplasmodium humuli* Miy. et. Taka.).

Insects.

- Vine louse (*Phylloxera vastatrix* Planch.).
 American apple capsids (*Heterocordylus malinus* Reut. and *Lygidia mendax* Reut.).
 Pear tingid (*Stephanitis pyri* Fab.).
 Colorado beetle (*Leptinotarsa decemlineata* Say).
 Plum curculio (*Conotrachelus nenuphar* Herbst.).
 Potato moth (*Phthorimaea operculella* Zell.).
 American lackey moths (*Malacosoma americana* Fab. and *M. dissitria* (Hubn.).
 Oriental fruit moth (*Cydia molesta* Busck).
 San Jose scale (*Aspidiotus perniciosus* Comst.).
 Japanese fruit scale (*Diaspis pentagona* Newst.).
 Apple fruit fly (*Rhagoletis pomonella* Walsh.).
 Cherry fruit flies (*Rhagoletis cerasi* Linn. *R. cingulata*, Loew, and *R. fausta* Osten-Sacken).
 Gooseberry fruit fly (*Epochra canadensis* Loew).

THIRD SCHEDULE.

Regulations Governing the Importation of Plants into England and Wales.

1. The restrictions on landing imposed by the order and these regulations do not apply to plants, the landing of which is authorized by a general license issued by the minister or by a special license issued by an inspector or to consignments of plants to the minister for experimental or scientific purposes.

2. *Inspection and certification as a condition of entry.*—(a) In the case of an importation of plants, otherwise than through the post, from a country whose service of plant inspection is recognized for the time being, each consignment must be accompanied by two copies of a certificate issued after inspection, and not more than fourteen days prior to the date of shipment, by a duly authorized official of the country whence the plants are exported, in the form prescribed below. One copy of the certificate must be produced to the customs officer at the port of entry and the other copy must be forwarded by the importer to the consignee. In the case of consignments imported through the post, a copy of the prescribed certificate need not be produced to the customs officer, but a copy must be affixed to each package.

The original of the certificate must be forwarded by post, before the plants are despatched, by the exporter to the Horticultural Division of the Ministry of Agriculture and Fisheries, Whitehall Place, London, S. W. I.

Certificate of Examination of Plants.

This is to certify that the plants included in the package or consignment described below were thoroughly inspected by _____, a duly authorized official of _____, on _____, and were found or believed by him to be healthy and free from any of the plant diseases or pests named in the *second schedule* to the destructive insects and pests order of 1922.

This additional certificate must be given for all potatoes:

Further, it is hereby certified that no case of the disease known as wart disease or black scab of potatoes (*Synchytrium endobioticum*) has occurred on the farm or holding where the potatoes included in this consignment were grown nor within 500 yards (approximately $\frac{1}{2}$ kilometer) thereof.

Signed _____
 (Official status) _____

The following details must be filled in by the shipper:

Number and description of packages in consignment-----
 Distinguishing marks-----
 Description of plants-----
 Grown at-----
 Name and address of exporter-----
 Name and address of consignee-----
 Name of vessel-----
 Date of shipment-----
 Port of shipment-----
 Port of landing in England and Wales-----
 Approximate date of landing-----

(Signed) -----

(b) In the case of an importation of plants from a country where no recognized service of plant inspection is maintained, and in the case of a consignment of plants which is not accompanied by copy certificates as above mentioned, or of a package of plants imported through the post to which a copy certificate is not attached, the plants shall be retained by the importer or consignee until they have been examined by an inspector of the Ministry of Agriculture and Fisheries at a suitable place designated by the inspector or by the ministry and certified in writing to be healthy and free from the insects and pests mentioned in the second schedule to this order or until their removal has been authorized in writing by the ministry or by an inspector of the ministry.

(c) Any imported plants which on inspection are found to be unhealthy or attacked by any insect or pest mentioned in the second schedule to this order, and which, in the judgment of the inspector, can not be cleaned by disinfection or other treatment, shall, with the packing and package, either be destroyed or returned to the country of exportation by the importer thereof.

(d) When disinfection or other treatment of the plants is allowed, it shall be carried out by the importer, and under the supervision of an inspector of the Ministry of Agriculture and Fisheries at a suitable place designated by the inspector or the ministry, and no part of the consignment shall be moved from the place designated without the written consent of the inspector of the Ministry of Agriculture and Fisheries.

(e) The ministry's charge for the services of the inspector and all charges for storage, cartage, and labor incident to inspection and disinfection, shall be paid by the importer.

3. Plants will not be deemed to be healthy which are attacked by any insect or pest mentioned in the schedule and the note to the sale of diseased plants order of 1922.

FEDERAL PLANT QUARANTINE ACT—PURPOSE AND FIELD COVERED.

HB-162.

FEBRUARY 15, 1923.

The Federal plant quarantine act of August 20, 1912, empowers the Secretary of Agriculture to prohibit or regulate the entry of foreign plants and plant products to prevent the entry into this country with such plants and plant products of new and dangerous plant pests, either insect enemies or plant diseases. It also empowers the Secretary of Agriculture to establish and maintain quarantined districts within the United States for the purpose of preventing the spread of plant enemies or diseases which may have gained local foothold and to cooperate with the States in measures looking to the extermination of such pests. For this purpose its powers are even broader than plants and plant products, inasmuch as it may control the interstate movement of any article of any character whatsoever capable of carrying any dangerous plant disease or insect infestation.

The Federal Horticultural Board was created August 21, 1912, to assist the Secretary of Agriculture in the enforcement of the Plant Quarantine Act. It is composed of five members, two representing the Bureau of Entomology, two the Bureau of Plant Industry, and one the Forest Service. The present membership of the board is as follows: C. L. Marlatt, chairman, W. A. Orton, George B. Sudworth, W. D. Hunter, and Karl F. Kellerman.

Regulation of entry of foreign plants and plant products.—Under this act some twenty-two quarantine and restrictive orders prohibiting or regulating the entry of foreign plants and plant products are now being enforced. These quarantine and other orders are for the purpose of excluding such pests as the Mediterranean and other fruit flies, the pink bollworm and other cotton pests, serious diseases of potatoes, cereals, and other important crops.

Domestic quarantines.—There are now being enforced some fifteen domestic quarantines controlling the interstate movement of plants and plant products. These have for their object the prevention of spread within the United States of such plant and forest enemies as the gipsy moth and the brown-tail moth, the pink bollworm of cotton, the date palm scale insects, the Japanese beetle, the European corn borer, the white pine blister rust, and the potato wart.

Control of particular plant enemies.—In addition to its quarantine activities, the board is concerned in large-scale control operations against particular plant enemies, either directly or in cooperation with other bureaus under special appropriations of Congress to effect the control and, if possible, extermination of such pests as the pink bollworm of cotton, the Japanese beetle, the gipsy and brown-tail moths, the European corn borer, the citrus canker, the potato wart disease, the white pine blister rust and the black stem rust, flag smut and take-all diseases of wheat.

The port inspection service.—For the enforcement of its various quarantine and regulatory orders, the board is now developing and maintaining a port inspection service at the principal ports of entry of the United States. This involves the complete control of the entry of products brought under regulation, as for example, all nursery stock and other plants and seeds, import material, such as cotton, the importation of which amounts to approximately \$50,000,000 worth annually, the importation of corn and small grains and a number of other minor plant products. With respect to the exclusion of the pink bollworm from Mexico, it maintains a border port inspection service along the entire Mexican border—a service which regulates the entry of all imports from Mexico and directs and supervises the disinfection of railway cars and freight, express, baggage and other materials entering from Mexico, to prevent the entry with such cars and materials of cotton seed or other carriers of the pink bollworm enemy of cotton. This Mexican border service involves some seven ports of entry.

Research work.—The board from time to time also cooperates with the other bureaus of the department in research investigations to secure information necessary for the proper determination of quarantine or other necessary regulations with respect to both foreign plant pests and to such pests of local establishment in the United States. Such research work of the board has had relation to most of the special subjects enumerated above and is undertaken by the board only when the other bureaus of the department are not able to give the necessary information and can not from the status of their appropriations and other commitments undertake the necessary investigational work.

Foreign cooperation.—Some 30 foreign countries have enacted legislation and appointed inspection officials to cooperate with the Department of Agriculture in the enforcement of the regulations and quarantines under the Federal plant quarantine act, governing imports of plants and plant products.

State cooperation.—The quarantine and other officials of the several States have been brought into a general organization for aid and cooperation in the enforcement of the Federal plant quarantine act and some 70 such State officials are now connected with the work of the board as collaborators of the Department of Agriculture and very materially assist in the enforcement of the Federal quarantine and regulatory orders.

Results.—The upwards of 10 years of enforcement of the Federal plant quarantine act has prevented the entry of a very large number of new pests of the farm, orchard, and forest. The number of foreign pests which have been intercepted with plant and plant product importations, of which a fairly accurate record has been kept, makes a very imposing list—many thousands of different interceptions covering a range of hundreds of new pests.

C. L. MARLATT,
Chairman, Federal Horticultural Board.

**MEMORANDUM FOR EMPLOYEES WHO USE TRANSPORTATION
REQUESTS IN OFFICIAL TRAVEL.**

JANUARY 23, 1923.

It has been brought to my attention that some of the employees of this board are making a practice of holding transportation request coupons until the end of the month, then submitting them with their reimbursement vouchers, while others mail them in to this office separately but only after considerable delay. In many cases coupons are not received at this office for from 15 to 20 days after the requests are used.

Attention is again called to the instructions printed on the back of the coupon, as follows:

This coupon to be detached by
traveler upon issue of ticket and
immediately mailed to Federal Horti-
cultural Board.

It is urgently requested that all employees of the board comply strictly with the above requirement. These coupons are needed here immediately after the requests are used, and a delay of even a few days in sending them in sometimes causes serious embarrassment, inasmuch as the transportation companies are usually very prompt in submitting their vouchers. I trust it will not be necessary to further emphasize the above instructions.

All canceled requests, with coupons attached, should also be immediately forwarded to this office.

Very truly yours,

C. L. MARLATT, *Chairman of Board.*

**INSTRUCTIONS FOR REPORTING LOSS OR DAMAGE TO SHIP-
MENTS.**

FEBRUARY 15, 1923.

The attention of employees of the board is called to the procedure which should be followed when freight or express shipments are received which have suffered loss or damage in transit.

When a shipment is received showing unconcealed loss or damage, the facts should be brought to the attention of the agent of the transportation company before the shipment is removed from the station, in order that he may make his regular report thereof to his company.

When a shipment is received showing concealed loss or damage, the facts are not usually apparent until the package is opened. In such cases the unpacking should be immediately discontinued upon discovery of the loss or damage, and the agent of the transportation company at once notified to call and inspect the shipment, thus enabling him to make his customary report to his company.

This procedure is necessary in order that the railroad and express companies may entertain our claims for loss or damage.

Any loss or damage should, of course, be noted on the back of the Government bill of lading. This is now being done satisfactorily. The same action should be taken where the shipment arrives on a commercial bill of lading. In every case of loss or damage, whether the shipment moved on a bill of lading or not, a full report of the circumstances should be immediately made to this office by letter.

Yours very truly,

R. C. ALTHOUSE,
Assistant to the Chairman.

CONVICTIONS FOR VIOLATIONS OF THE PLANT QUARANTINE ACT.

The following convictions for violations of the plant quarantine act were reported to the Board during the period January 1 to March 31, 1923.

Mediterranean fruit-fly and melon-fly quarantine.—In the case of the United States *v.* Ethel M. Bish in the shipment from Honolulu, Hawaii, to Venice, Calif. (intercepted at San Francisco), without inspection and certification, of two avocados, the defendant pleaded guilty and was sentenced to pay a fine of \$25. (Plant Quarantine Case No. 177.)

In the case of the United States *v.* Dr. E. J. Overend, Oakland, Calif., in the carrying of four mangoes and 1 guava, without inspection and certification, from Honolulu, Hawaii, to San Francisco, Calif. (intercepted while vessel was in quarantine), the defendant pleaded guilty and was sentenced to pay a fine of \$50. (Plant Quarantine Case No. 143.)

White-pine blister-rust quarantine.—In the case of the United States *v.* the Maywood Nursery Co., Maywood, Ill., in the interstate shipment of currant and gooseberry plants to a point outside of the quarantined area, the defendant pleaded guilty and was fined \$25. (Plant Quarantine Case No. 118.)

In the case of the United States *v.* the D. Hill Nursery Co., Dundee, Ill., in the interstate shipment of five-leaved pines to a point outside of the quarantined area, the defendant pleaded guilty and was fined \$25. (Plant Quarantine Case No. 137.)

In the case of the United States *v.* the Naperville Nurseries, Naperville, Ill., in the interstate shipment of currant and gooseberry plants to a point outside of the quarantined area, the defendant pleaded guilty and was fined \$25. (Plant Quarantine Case No. 116.)

In the case of the United States *v.* Harvard Evergreen Nursery, Harvard, Ill., in the interstate shipment of white-pine trees to a point outside of the quarantined area, the defendant was fined \$25. (Plant Quarantine Case No. 147.)

In the case of the United States *v.* William C. Moore & Co., Newark, N. Y., in the interstate shipment of five-leaved pines to a point outside of the quarantined area, the defendant pleaded guilty and was fined \$25. (Plant Quarantine Case No. 106.)

In the case of the United States *v.* the Farmer Seed and Nursery Co., Fari-bault, Minn., in the interstate shipment of currant and gooseberry plants to points outside of the quarantined area, the defendant pleaded guilty and was fined \$50. (Plant Quarantine Cases Nos. 152 and 153.)

LIST OF CURRENT QUARANTINE AND OTHER RESTRICTIVE ORDERS.

QUARANTINE ORDERS.

The numbers assigned to these quarantines indicate merely the chronological order of issuance of both domestic and foreign quarantines in one numerical series. The quarantine numbers missing in this list are quarantines which have either been superseded or revoked. For convenience of reference these quarantines are here classified as domestic and foreign.

DOMESTIC QUARANTINES.

Date palms.—Quarantine No. 6: Regulates the interstate movement of date palms and date-palm offshoots from Riverside County, Calif., east of the San Bernardino meridian; Imperial County, Calif.; Yuma, Maricopa, and Pinal Counties, Ariz.; and Webb County, Tex.: on account of the *Parlatoria* scale (*Parlatoria blanchardi*) and the *Phoenicococcus* scale (*Phoenicococcus marlatti*).

Hawaiian fruits.—Quarantine No. 13, revised: Prohibits or regulates the importations from Hawaii of all fruits and vegetables, in the natural or raw state, on account of the Mediterranean fruit fly and the melon fly.

Sugar cane.—Quarantine No. 16: Prohibits the importation from Hawaii and Porto Rico of living canes of sugar cane, or cuttings or parts thereof, on account of certain injurious insects and fungous diseases.

Five-leaved pines, Ribes and Grossularia.—Quarantine No. 26, as amended: Prohibits the interstate movement of five-leaved pines, currant and gooseberry plants from all States east of and including the States of Minnesota, Iowa, Missouri, Arkansas, and Louisiana to points outside of this area; prohibits further (1) the interstate movement of five-leaved pines and black-currant plants to points outside the area comprising the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York, and, (2) to protect the State of New York, the movement from the New England States, on account of the white-pine blister rust.

Sweet potato and yam.—Quarantine No. 30: Prohibits the movement from the Territories of Hawaii and Porto Rico into or through any other Territory, State, or District of the United States of all varieties of sweet potatoes and yams (*Ipomoea batatas* and *Dioscorea* spp.), regardless of the use of which the same are intended, on account of the sweet-potato weevil (*Cylas formicarius*) and the sweet-potato scarabee (*Euscepes batatae*).

Banana plants.—Quarantine No. 32: Prohibits the movement from the Territories of Hawaii and Porto Rico into or through any other Territory, State, or District of the United States of any species or variety of banana plants (*Musa* spp.), regardless of the use for which the same are intended, on account of two injurious weevils, *Rhabdocnemis obscurus* and *Metamasius hemipterus*.

Black stem rust.—Quarantine No. 38, as amended: Prohibits the movement interstate to any point outside of the quarantined area of the common barberry and its horticultural varieties, as well as certain other species of *Berberis* and *Mahonia*, on account of the black stem rust of wheat, oats, barley, rye, and many wild and cultivated grasses.

European corn borer.—Quarantine No. 43 (second revision) as amended: Regulates the movement interstate to any point outside of the quarantined area of (1) corn and broom corn (including all parts of the stalk), all sorghums, sudan grass, celery, green beans in the pod, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, from infested areas in Maine, New Hampshire, Massachusetts, and Rhode Island, and (2) corn and broom corn (including all parts of the stalk), all

sorghums, and sudan grass from infested areas in New York, Pennsylvania, Ohio, and Michigan on account of the European corn borer (*Pyrausta nubilalis*).

Gipsy moth and brown-tail moth.—Quarantine No. 45, as amended: Regulates the movement interstate to any point outside of the quarantined towns and territory, or from points in the generally infested area to points in the lightly infested area, of stone or quarry products, and of the plants and the plant products listed therein. The quarantine covers all the New England States.

Hawaiian and Porto Rican cotton, cotton seed, and cottonseed products.—Quarantine No. 47: Regulates the movement of cotton, cotton seed, and cottonseed products from Hawaii and Porto Rico on account of the pink bollworm and the cotton blister mite, respectively.

Japanese beetle.—Quarantine No. 48, revised: Regulates the movement interstate to any point outside of certain portions of the counties of Burlington, Gloucester, and Camden, N. J., and certain portions of the counties of Philadelphia, Montgomery, and Bucks, Pa., of the following articles from the heavily infested area: (1) Sweet, green, or sugar corn, grapes, lettuce, cabbage, and forage crops of all kinds, including hay and straw; (2) nursery, ornamental, and greenhouse stock, and all other plants, except bulbs and cut flowers; and (3) soil, compost, and manure other than fresh manure; and from the lightly infested area, (1) nursery, ornamental, and greenhouse stock and all other plants except bulbs and cut flowers; and (2) soil, compost, and manure other than fresh manure, on account of the Japanese beetle (*Popillia japonica*).

United States quarantined to protect Hawaii.—Quarantine No. 51: Regulates the movement from the United States to the Territory of Hawaii, as ships' stores or as baggage or effects of passengers or crews, of sugar cane, corn, cotton, alfalfa, and the fruits of the avocado and papaya.

Pink bollworm.—Quarantine No. 52, with revised rules and regulations: Prohibits the interstate movement from the infested and regulated areas of Texas, Louisiana, and New Mexico of cotton, including all parts of the plant, seed cotton, cotton lint, linters, gin waste and all other forms of cotton lint, cotton seed, cottonseed hulls, cottonseed cake and meal, bagging and other containers of the articles enumerated, and also railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the infested districts or which are fouled with such products, hay and other farm products, farm household goods, and farm equipment, except as provided in the rules and regulations supplemental thereto, on account of the pink bollworm of cotton (*Pectinophora gossypiella* Saunders).

Satin moth.—Quarantine No. 53: Prohibits the interstate movement to points outside of the infested areas in New Hampshire and Massachusetts of all species or varieties of poplar and willow, on account of the satin moth (*Stilpnotia salicis* L.).

White-pine blister rust.—Quarantine No. 54, as amended: Prohibits the movement from the State of Washington of five-leaved pines, currant and gooseberry plants, on account of the white-pine blister rust.

FOREIGN QUARANTINES.

Irish potatoes.—Quarantine No. 3: Prohibits the importation of the common or Irish potato from Newfoundland; the islands of St. Pierre and Miquelon; Great Britain, including England, Scotland, Wales, and Ireland; Germany; and Austria-Hungary, on account of the disease known as potato wart.

Mexican fruits.—Quarantine No. 5, as amended: Prohibits the importation of oranges, sweet limes, grapefruit, mangoes, achras sapotes, peaches, guavas, and plums from the Republic of Mexico, on account of the Mexican fruit fly.

Five-leaved pines, Ribes, and Grossularia.—Quarantine No. 7, as amended: Prohibits the importation from each and every country of Europe and Asia, and from the Dominion of Canada and Newfoundland, of all five-leaved pines and all species and varieties of the genera *Ribes* and *Grossularia*, on account of the white-pine blister rust.

Cotton seed and cottonseed hulls.—Quarantine No. 8, as amended: Prohibits the importation from any foreign locality and country, excepting only the locality of the Imperial Valley, in the State of Lower California, Mexico, of cotton seed (including seed cotton) of all species and varieties, and cottonseed hulls, on account of the pink bollworm. Cotton and cotton seed from the Imperial Valley may be entered under permit and regulation.

Seeds of avocado or alligator pear.—Quarantine No. 12: Prohibits the importation from Mexico and the countries of Central America of the seeds of the avocado or alligator pear on account of the avocado weevil.

Sugar cane.—Quarantine No. 15: Prohibits the importation from all foreign countries of living canes of sugar cane, or cuttings or parts thereof, on account of certain injurious insects and fungous diseases. There are no restrictions on the entry of such materials into Hawaii and Porto Rico.

Citrus nursery stock.—Quarantine No. 19: Prohibits the importation from all foreign localities and countries of all citrus nursery stock, including buds, scions, and seeds, on account of the citrus canker and other dangerous citrus diseases. The term "citrus," as used in this quarantine, includes all plants belonging to the subfamily or tribe *Citrateae*.

European pines.—Quarantine No. 20: Prohibits, on account of the European pine-shoot moth (*Evectria buoliana*), the importation from all European countries and localities of all pines not already excluded by Quarantine No. 7.

Indian corn or maize and related plants.—Quarantine No. 24, as amended: Prohibits the importation from southeastern Asia (including India, Siam, Indo-China, and China), Malayan Archipelago, Australia, New Zealand, Oceania, Philippine Islands, Formosa, Japan, and adjacent islands, in the raw or unmanufactured state, of seed and all other portions of Indian corn or maize (*Zea mays* L.), and the closely related plants, including all species of Teosinte (*Euchlaena*), Job's tears (*Coix*), *Polytoca*, *Chionachne*, and *Sclerachne*, on account of the downy mildews and *Physoderma* diseases of Indian corn, except that Indian corn or maize may be imported under permit and upon compliance with the conditions prescribed in the regulations of the Secretary of Agriculture.

Citrus fruit.—Quarantine No. 28: Prohibits the importation from eastern and southeastern Asia (including India, Siam, Indo-China, and China), the Malayan Archipelago, the Philippine Islands, Oceania (except Australia, Tasmania, and New Zealand), Japan (including Formosa and other islands adjacent to Japan), and the Union of South Africa, of all species and varieties of citrus fruits, on account of the citrus canker, except that oranges of the mandarin class (including satsuma and tangerine varieties) may be imported under permit and upon compliance with the conditions prescribed in the regulations of the Secretary of Agriculture.

Sweet potato and yam.—Quarantine No. 29: Prohibits the importation for any purpose of any variety of sweet potatoes or yams (*Ipomoea batatas* and *Dioscorea* spp.) from all foreign countries and localities, on account of the sweet-potato weevils (*Cylas* spp.) and the sweet-potato scarabee (*Euscepes batatae*).

Banana plants.—Quarantine No. 31: Prohibits the importation for any purpose of any species or variety of banana plants (*Musa* spp.), or portions thereof, from all foreign countries and localities, on account of the banana-root borer (*Cosmopolites sordidus*). No restrictions are placed on the importation of the fruit of the banana.

Bamboo.—Quarantine No. 34: Prohibits the importation for any purpose of any variety of bamboo seed, plants, or cuttings thereof capable of propagation, including all genera and species of the tribe *Bambuseae*, from all foreign countries and localities, on account of dangerous plant diseases, including the bamboo smut (*Ustilago shiraiana*). This quarantine order does not apply to bamboo timber consisting of the mature dried culms or canes which are imported for fishing rods, furniture making, or other purposes, or to any kind of article manufactured from bamboo or to bamboo shoots cooked or otherwise preserved.

Nursery stock, plants, and seeds.—Quarantine No. 37, with regulations, revised: Prohibits the importation of nursery stock and other plants and seeds from all foreign countries and localities, on account of certain injurious insects and fungous diseases, except as provided in the regulations. Under this quarantine the following plants and plant products may be imported without restriction: Fruits, vegetables, cereals, and other plant products imported for medicinal, food, or manufacturing purposes and field, vegetable, and flower seeds. The entry of the following nursery stock and other plants and seeds is permitted under permit:

(1) Bulbs of the following genera: *Lilium* (lily), *Convallaria* (lily of the valley), *Hyacinthus* (hyacinth), *Tulipa* (tulip), and *Crocus*; and, for a period not exceeding three years from January 1, 1923, *Chionodoxa* (glory-of-the-snow), *Galanthus* (snowdrop), *Scilla* (squill), *Fritillaria imperialis* (crown

imperial), *Fritillaria meleagris* (guineahen flower), Muscari (grape hyacinth), Ixia, Eranthis (winter aconite), and Narcissus (jonquil, daffodil, etc.).

(2) Stocks, cuttings, scions, and buds of fruits for propagation.

(3) Rose stocks for propagation, including Manetti, Multiflora, Brier Rose, and Rosa Rugosa.

(4) Nuts, including palm seeds, for propagation.

(5) Seeds of fruit, forest, ornamental, and shade trees, seeds of deciduous and evergreen ornamental shrubs, and seeds of hardy perennial plants.

Provision is also made for the issuance of special permits under safeguards to be prescribed in such permits for the entry in limited quantities of nursery stock and other plants and seeds not covered in the preceding lists for the purpose of keeping the country supplied with new varieties and necessary propagating stock.

Flag smut and take-all.—Quarantine No. 39, with regulations: Prohibits the importation of seed or paddy rice from Australia, India, Japan, Italy, France, Germany, Belgium, Great Britain, Ireland, and Brazil on account of two dangerous plant diseases known as flag smut (*Urocystis tritici*) and take-all (*Ophiobolus graminis*). Wheat, oats, barley, and rye may be imported from the countries named only under permit and upon compliance with the conditions prescribed in the regulations of the Secretary of Agriculture.

European corn borer.—Quarantine No. 41, with regulations, revised: Prohibits the importation of the stalk and all other parts, whether used for packing or other purposes, in the raw or unmanufactured state, of Indian corn or maize, broom corn, sweet sorghums, grain sorghums, Sudan grass, Johnson grass, sugar cane, pearl millet, napier grass, teosinte, and Job's tears, from all foreign countries and localities, except as provided in the rules and regulations supplemental thereto, on account of the European corn borer (*Pyrausta nubilalis*) and other dangerous insects and plant diseases.

Mexican corn.—Quarantine No. 42, with regulations: Prohibits the importation of Indian corn or maize from Mexico, except as provided in the rules and regulations supplemental thereto, on account of the contamination of such corn with cottonseed more or less infested with the pink bollworm.

Stocks, cuttings, scions, and buds of fruits.—Quarantine No. 44: Prohibits the importation of stocks, cuttings, scions, and buds of fruits from Asia, Japan, Philippine Islands, and Oceania (including Australia and New Zealand) on account of dangerous plant diseases, including Japanese apple cankers, blister blight, and rusts, and injurious insect pests, including the oriental fruit moth, the pear fruit borer, the apple moth, etc.

Citrus black fly.—Quarantine No. 49, with regulations: Prohibits the importation of fruits and vegetables and of plants or portions of plants used as packing material in connection with shipments of such fruits and vegetables, or otherwise, from Cuba, the Bahamas, Jamaica, Canal Zone, Costa Rica, India, Philippine Islands, Ceylon, and Java, except as provided in the rules and regulations supplemental thereto, on account of the citrus black fly (*Aleurocanthus woglumi*).

OTHER RESTRICTIVE ORDERS.

The regulation of the entry of nursery stock from foreign countries into the United States was specifically provided for in the plant quarantine act. The act further provides for the similar regulation of any other class of plants or plant products when the need therefor shall be determined. The entry of the plants and plant products listed below has been brought under such regulation:

Nursery stock.—The conditions governing the entry of nursery stock and other plants and seeds from all foreign countries and localities are indicated above under "Foreign quarantines." (See Quarantine No. 37, revised.)

Irish potatoes.—The importation of Irish potatoes is prohibited altogether from the countries enumerated in the potato quarantine. Potatoes may be admitted from other foreign countries under permit and in accordance with the provisions of the regulations issued under order of December 22, 1913, bringing the entry of potatoes under restriction on account of injurious potato diseases and insect pests. Importation of potatoes is now authorized from the following countries: Bermuda and the Dominion of Canada; also from the States of Chihuahua and Sonora, and the Imperial Valley of Lower California, Mexico. The regulations issued under this order have been amended so as to permit, free of any restrictions whatsoever under the plant quarantine act, the importa-

tion of potatoes from any foreign country into the Territories of Porto Rico and Hawali for local use only and from the Dominion of Canada and Bermuda into the United States or any of its Territories or Districts.

Avocado, or alligator pear.—The order of February 27, 1914, prohibits the importation from Mexico and the countries of Central America of the fruits of the avocado, or alligator pear, except under permit and in accordance with the other provisions of the regulations issued under said order, on account of the avocado weevil. Entry is permitted through the port of New York only and is limited to the large, thick-skinned variety of the avocado. The importation of the small, purple, thin-skinned variety of the fruit of the avocado and of avocado nursery stock under 18 months of age is prohibited.

Cotton.—The order of April 27, 1915, prohibits the importation of cotton from all foreign countries and localities, except under permit and in accordance with the other provisions of the regulations issued under said order, on account of injurious insects, including the pink bollworm. These regulations apply in part to cotton grown in and imported from the Imperial Valley, in the State of Lower California, Mexico.

Cottonseed products.—The order of June 23, 1917, prohibits the importation of cottonseed cake, meal, and all other cottonseed products, except oil, from all foreign countries, and a second order of June 23, 1917, prohibits the importation of cottonseed oil from Mexico, except under permit and in accordance with the other provisions of the regulations issued under said orders, on account of injurious insects, including the pink bollworm.

MISCELLANEOUS REGULATIONS.

Rules and regulations governing (1) entry for immediate export, (2) entry for immediate transportation and exportation in bond, and (3) safeguarding the arrival at a port where entry or landing is not intended of prohibited plants and plant products.—These rules and regulations, as revised August 1, 1920, govern the unloading and transfer of cargoes and transportation in bond when it is determined that such entry can be made without involving risk to the plant cultures of the United States, and also provide for the safeguarding at a port or within the territorial waters of the United States where entry or landing is not intended of any prohibited or restricted plants and plant products.

Rules and regulations governing the movement of plants and plant products into and out of the District of Columbia.—These rules and regulations were promulgated August 26, 1920, under the amendment to the plant quarantine act of May 31 of that year. They provide for the regulation of the movement of plants and plant products, including nursery stock, from or into the District of Columbia and for the control of injurious plant diseases and insect pests within the said District.

ADDITIONAL COPIES

OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.

AT

10 CENTS PER COPY

PURCHASER AGREES NOT TO RESELL OR DISTRIBUTE THIS
COPY FOR PROFIT.—PUB. RES. 57, APPROVED MAY 11, 1922



